

THE ANNUAL
OF THE
BRITISH SCHOOL AT ATHENS

No. XXVIII.

SESSION 1926-1927

PRINTED FOR THE SUBSCRIBERS AND SOLD ON THEIR BEHALF BY

MACMILLAN & CO., LIMITED

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EXCAVATIONS AT SPARTA, 1927.

(PLATES I-XII.)

§ I.—INTRODUCTORY.

THE campaign of 1927, of which the principal results are described below, began on March 29th, and ended on May 21st. The Director was present throughout, and owing to the smallness of the party, for there were no students available to help, had to devote all his time to supervision of the work in the field, both at the Theatre and on the Acropolis. He had the assistance of Mrs. Woodward, who kept the inventory of marbles and dealt with the pottery and other small finds as brought in; and of Professor J. P. Droop, who generously consented to devote most of his three months' leave from the University of Liverpool to helping in the work at Sparta, and undertook the exacting task of working over the pottery found on the Acropolis during this and the three previous seasons. The fruits of his labours appear in § 4 below. His help in the matter of photography and in cleaning various small objects, and his expert advice in many other directions, are gratefully acknowledged. The only other member of the party was Mr. De Jong, whose careful work in planning and leveling is by no means fully represented by the plans published in this report, for he made several drawings, and abundant notes, of capitals and other architectural marbles which await publication when opportunity offers.

As will have been seen from the summary published in the Annual Report for 1926-27, our tasks at the Theatre comprised the following: the completion of the uncovering of the retaining-walls on the south, as far as their outer angles, the principal discovery being that of a late Roman Nymphaeum in front of the western wall; the excavation of a further portion of the front seats in the *cavea*, which revealed also some more inscribed blocks in position on the inner side of the water-channel in front of them; and the exploration and partial clearing of extensive remains of late Roman buildings south of the stage-region. This year's finds of inscriptions were less numerous than in the previous three campaigns, and their publication is withheld, perforce, until the next volume.

We also explored partially a large building of the Roman imperial period, situated some fifty metres south of the Nymphaeum, in the centre of which a mosaic pavement had been found in 1925. No other mosaic came to light, and the incidental finds were disappointing. The plan was not fully elucidated, but enough was uncovered to shew that the structure had been either a large villa, or perhaps more likely a gymnasium or bathing-establishment, built, and in places remodelled, in Roman times. At one point only, in a deep cutting below the foundations of the north wall, Hellenic remains appeared, in the form of a large quantity of black-glazed pottery, apparently domestic ware of the fifth to third centuries B.C. It is more than doubtful if any important building of Hellenic date had occupied the site, and the region did not seem to warrant complete excavation.

On the Acropolis we completed the exploration of the votive deposit which had yielded such valuable finds during the three previous seasons, and laid bare all that remained of the small building found in 1926 at a deep level below the back wall of the *cavea*. In § 3 I publish a short account of the excavation of this region in 1926-27, followed by Professor Droop's article on the Laconian pottery (§ 4), and by Miss Lamb's on the principal bronze objects (§ 5) from our four seasons' work on the site. It is hoped to publish later accounts of the pithos-fragments, the archaic terracottas, the Attic vase-fragments and inscribed sherds, and the miscellaneous pieces of sculpture, which, though mostly small and sadly damaged, include several interesting fragments.

Outlying work on the Acropolis yielded mostly negative results, for the presence of collapsed Byzantine masonry in most of our trial-pits north-east of the Theatre shewed that deep digging would be dangerous, and in all probability unremunerative.

It remains to add that the Hellenic Government was again represented by Dr. Themistokles Karachálios, Ephor of Laconia and Messenia, and that as foreman, in the absence of Geórgios Alexópoulos of Mycenae, who was no longer available, an efficient substitute was found in Demétrios Soterákos of Vársova, who had worked for the School at the Orthia Sanctuary twenty years before. Our number of workmen amounted to about forty, most of whom had served during the three preceding seasons.

A. M. WOODWARD.

EXCAVATIONS AT SPARTA, 1927.

§ 2.—THE THEATRE.

(PLATES I-IV.)

My arrangement follows, as far as possible, that of the reports in Vols. xxvi and xxvii.

The Cavea.

A laborious but remunerative piece of work which occupied two gangs of specially picked men for three weeks consisted in making a further cutting into the deep deposit which overlies the edge of the Orchestra and the front seats, north-westwards from the limit of the previous excavation in the east of the *cavea*. This involved the removal of some Byzantine house-walls, at a level of about two metres above the Orchestra, into which portions large and small of theatre-seats had been built; the other marble blocks found here were unimportant. As the work progressed we again found that the deposit for a depth of *ca.* 1·80 m. above the original Orchestra-level consisted of the silt-like material washed down from the slopes above, in which there were practically no small objects found. Deep down in it were a few architectural marbles, including two large fragments of Doric columns of poorish workmanship, suggesting the Imperial era (lower diameter ·60 m.). There was no sculpture except a broken herm, also of poor and late style, with a socket for the insertion of the head, and cuttings at the sides indicating use as a balustrade-post. The inscriptions were scanty, but mention must be made of a fragment of a long and well-cut list of Spartan names which must date from about 400 B.C., and of a statue-base, bearing a Greek inscription, in lettering typical of the era of Constantine, in honour of a Proconsul, Πουβλίλ(ιος) Ὀπτάτιανός. This is interesting alike on historical and literary grounds, for not only does it give us a new name for the still slender list of the Proconsules Achaiae, but it sheds light on the career of a man who is better known by his name of Publilius Optatianus Porphyrius,

as a versifier who secured by his verses the favour of the Emperor Constantine I, with the result that he was recalled from exile and promoted to high office.¹

We found the front row of seats undisturbed, though the backs of the benches were much damaged, and cleared the foot of staircase No. VII (General Plan, *B.S.A.* xxvi., Pl. XIV); we just reached, in the extreme edge of the cutting, the arm of the bench adjoining the next stairway (No. VI, *ibid.*). The series of rectangular holes for the masts for the *velum* was found to continue, in the plinth supporting the benches (cf. *op. cit.*, p. 126, *init.*), and the channel round the Orchestra proved also undisturbed, though lacking its cover-slabs. Moreover, the series of inscriptions engraved on the upper surface of the blocks forming the inner side of this channel² ran on continuously; and we thus obtained seven new blocks, inscribed with nine lists of magistrates, either Ephors or Nomophylakes, of the period of Trajan and Hadrian. One duplicates a list found on a fallen block from the east Parodos-wall,³ and three others repeat lists known already from Fourmont's copies.⁴

The furthest block reached was uninscribed, as far as we uncovered it, so it is possible that these texts do not run further than this point. No traces of the Orchestra-paving had survived here. The western portion of the Orchestra and the remainder of the front seats have thus been left unexcavated. From the point of view of the plan nothing would be gained by completing this task, and I feel sure that in the process no finds of architectural marbles or inscriptions would come to light of sufficient importance to compensate for the labour and expense involved.

The Retaining-Walls.

We have now completed the uncovering of the retaining-walls on the south from end to end, the work in 1927 having comprised, at the east end the excavation of a wide strip from the foot of the external staircase

¹ This inscription will, I hope, be published in the next volume of the *Annual*. It is of additional interest in view of the recent identification of Optatianus's name in a mutilated inscription found in Rome, which gives a list of distinguished officials of the period (*Notiz. d. Scavi*, 1917, p. 22). For a fuller discussion of this list see E. Groag, *Wiener Studien*, xlv. (1926-27), pp. 102-9; I am indebted to Mr. A. D. Nock for a summary of this article, which I have not seen.

² *B.S.A.* xxvi. pp. 200 ff., 2 (*a-e*).

³ *B.S.A.* xxvii. p. 220, E 33.

⁴ *I.G.* v. 1, 59, 65, 79; the last only has been refound.

(*B.S.A.* xxvii. pp. 183 ff.) as far as the outer south-east angle, and on the west of a similar strip from the south-west angle eastwards as far as the off-set of the bastion, which (as stated in last year's report, *op. cit.*, p. 178) proved not to have carried a corresponding outer staircase.

At the east end we found eight courses of marble facing-blocks *in*

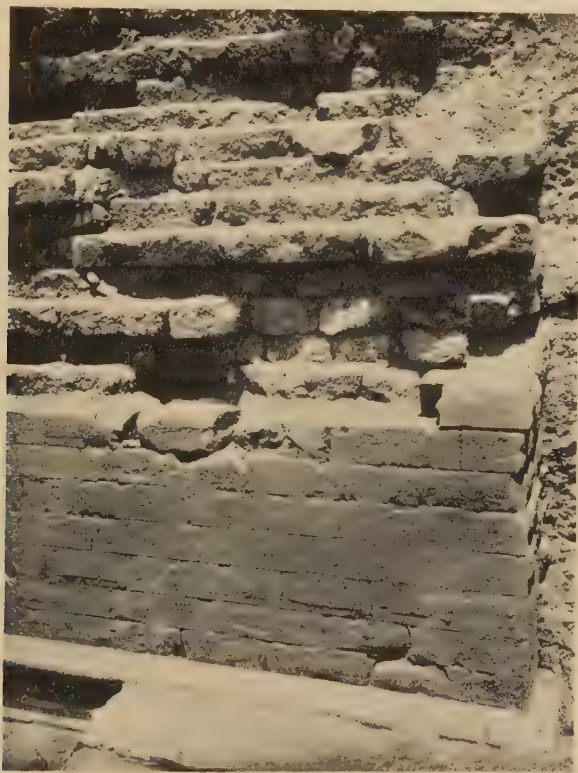


FIG. 1.—RETAINING-WALL OF THEATRE: SOUTH-EAST ANGLE.

situ above the *torus* moulding, and in clearing the angle we established the fact that the marble blocks did not return along the retaining-wall on the east. The transition from marble to limestone was effected by the simple method of rustivating the east face of each marble angle-block to harmonise with the coarser rustication of the limestone wall beyond them, and the *torus* ends with the east face of the angle-block (Fig. 1).

A settlement of Byzantine date came to light close to the modern

level, and digging through this we found that, over the marble pavement east of the stairs, buildings of late Roman date had been erected, with floors of *opus sectile* in variegated marbles, laid nearly a metre above the original level and approximately flush with the *torus* course. These indeterminate buildings seem to have been houses with rooms on a small scale, but with massive walls built partly of large blocks and partly of tough rubble-concrete, which had little regard to the orientation of the retaining-wall (see Pl. I.). We did not ascertain how far they extended southwards, and the incidental finds were scanty. Nothing calls for mention except a pleasing little marble Athena-head of Roman date (p. 31, No. 6 and Fig. 11) and a fragment of inscribed column deliberately smashed up into small pieces, which seems to have contained an epigram in lettering indicative of the era of Constantine; but its condition defies restoration.

The Nymphaeum.

The clearance of the retaining-wall on the west was far more remunerative, for it was soon apparent that the brick walls which had begun to appear in 1926 just in front of the west bastion belonged to an elaborate structure. The full excavation of this was imperative, and resulted in the discovery of a large fountain-basin built of brick (Plates II. and III.), with a massive brick wall on the north side rising higher than the walls enclosing the basin itself, and separated from the face of the retaining-wall by a space of less than a metre.

The internal dimensions of the basin are 13·2 by 2·2 metres, inclusive of its two apsidal ends, and it has a maximum depth of one metre; externally, inclusive of the wall on the north, it forms a rectangle measuring 15·1 by 5·1 metres. The floor is paved with brick-tiles measuring ·55 m. square, with diagonal scorings, and is fortunately undamaged; there is a slight fall (·10 m. in all) from west to east, and an escape-hole was found near the east end of the south wall measuring ·15 by ·07 m. The walls containing the basin are of brick and mortar on a poor rubble footing, and it is lined internally with plaster, which is carefully rounded off at the junction of walls and floor. The outer faces, except on the north, and the upper surfaces of the four sides were originally marble-faced, but little of this remains, apart from a well-preserved portion on the south wall where the facing-slabs are jointed to represent coursed masonry, the lowest

course measuring $\cdot 185$ m. and that above it $\cdot 24$ m. in height. The brick wall which rises above the north wall of the basin is of similar but more solid construction, as it is $1\cdot 15$ m. wide, standing on a rubble footing *ca.* $\cdot 18$ m. high; it also must have been originally marble-faced. It is nowhere preserved to a height of more than a metre, and we have no safe clue to its original height. Examination of the brickwork shewed that in 80 cmm. there were thirteen courses of brick, of varying thickness, giving a total height of $\cdot 60$ m., and thus representing a proportion of 3 : 1



FIG. 2.—MARBLE SEAT AT THE NYMPHAEUM.

between bricks and mortar.¹ The great majority of the bricks both in this wall and in those of the basin, and elsewhere in the structure as a whole, bore stamps shewing that they were originally used—or at least intended—for the *Skenotheke*, and almost all were of types published by Mr. Tillyard in his discussion of the examples found in 1906 in the trial-trenches on the Theatre-site.²

¹ The lowest brick-course consisted of large bricks similar to those used for the floor of the basin; the others varied in size and thickness, most being $\cdot 05$ m. thick, the rest $\cdot 045$ or $\cdot 035$ m.

² *B.S.A.* xiii. pp. 191 ff. The stamped bricks found in or adjacent to the basin were most carefully worked over and sorted by Miss G. Parkin, who joined the excavators for a few days in 1927. I hope to make use of her data in a subsequent publication.

The north wall of the basin is thicker than the south wall, and in the marble slabs still preserved in place are shallow cuttings to take various objects, all presumably of marble. Two of these were still *in situ*, and others came to light as we cleared the basin of the rubble which filled it. The central position was occupied by a marble seat consisting of a solid block, with claw-feet, without arms or back, on the front panel of which was carved in relief an eagle killing a snake (Fig. 2), and palmettes on the sides. Flanking this were two other seats, of less decorative type, with palmette-ornaments only. One was found in position to the west of the central seat, the other had fallen into the basin at about a corresponding distance to the east of it. A fourth seat, also with palmette-ornament, was found outside the basin to the south, supporting a marble trough (to be described below). There is no doubt that all these seats had been brought from the Theatre, as two more were found, one in 1906, the other in 1924, at the corners of the front seats on the west and east respectively.¹ Other marble objects found in clearing the basin included, in sculpture, a seated lion, a running boar, a small headless figure of Herakles and a headless tritoness (see below, pp. 32 ff. and Figs. 12-14); and among architectural fragments two cornice-blocks of a pattern not found elsewhere at the Theatre, a large piece of entablature from a curved façade and two small pieces of an unfluted column.

Outside the south wall there stood originally a row of five rectangular marble basins, of which the two westernmost have survived *in situ* and a broken fragment of the easternmost came to light near its original position. These were fed by narrow supply-channels running through the wall just below its marble covering, and thus could only have been filled when the main basin itself was full. That on the west was *ca.* 1.60 m. long, and had moulded supports in the form of pilasters, and that next it was plain, and measured 1.30 m. in length. The former rested on a marble seat, as has been mentioned, and on an inscribed statue-base in honour of Pomponius Panthales Diogenes, son of Aristetas, of which another example exists.² As the recipient seems to have flourished at about the era of Caracalla, this re-use of his statue-base can hardly be dated before the middle of the third century, at the very earliest, and may, of course, be much later. The other basin, which rests on an inverted architrave-block, bears the

¹ That found in 1906 is inscribed, cf. *B.S.A.* xii. p. 459, No. 10.

² *I.G.* v. 1, 547.

following inscription round its edge in lettering which suggests the second century B.C. by its good proportions and absence of apices; the orthography of the name *Κρατήιππ-* and of *ἐποίῆά[ν]*, as also of *αὐτῶι*, would suit the preceding century as well, but the horizontal bars of the *sigma* warn us against putting it much before 200 B.C.

(front)		(r. side)
ΜΑΡΔΟΝ	ca. 23 letters lost	ΓΕΝΟ
(back)	(l. side)	
ΣΥΝΑΥΤΟΙΑΙ	ΙΣΑ	ΝΙΚΟΚΛΕΟΣΕΠΟΙΗΑ

Μαρδόν[ιος - - -]ας (or *-αξ*) *γενό[μ]ενος καὶ οἱ σὺν αὐτῶι Ἀγῆς Ἀ[ρ]ιστοκλέος Κρατήιπ[πίδας ?] Νικοκλέος ἐποίῆά[ν].*¹

(A flaw in the marble seems to account for the wide space left between the Γ and Ι in the name Ἀγῆς.

It is at any rate clear that both basins are re-used material, and furnish no direct evidence for the date of the structure in which they were finally used. Both, it may be noted, were broken in antiquity and mended with iron rivets.

In the space between the back wall and the retaining-wall of the Theatre, Byzantine interments came to light at different levels; one was covered with a vaulted brick roof, but none of them yielded any objects associated with the skeleton. At the east end this space was walled across with bricks which continued the outer face of the east wall of the basin; and through them was cut a rectangular aperture leading, at a lower level, to a small tile-drain, square in section and covered with small stone slabs; its bed is at a level of about .70 m. below that of the basin, and it leads in a direction slightly east of south. Midway along the east end of the basin a small branch drain runs off from it due south, in the form of a terracotta pipe of the pattern normally found in this region. Neither drain was followed further, but it is probable that the tile-drain (if not both) joined one of the channels of similar construction which we found flowing along the street to the south of the stage-buildings.²

¹ The last letter in l. 1 might be either Ξ or Σ, giving us a choice, between *e.g.* [γερονσ]ας or [ταμ]ας and *e.g.* [νομοφύλ]ας or [παλαιστροφύλ]ας. If the title were as short as *ταμίας* the father's name would have been unusually long. I suggest *Κρατήιπ[πίδας]* as the space seems rather too large for the more likely *Κρατήιπ[πος]* or *Κρατηκ[λῆς]*.

² Cf. below, p. 18.

In the space immediately west of the outlet we found, broken up intentionally, it seems, numerous pieces of a marble grille, which is shewn in Mr. De Jong's drawing (Fig. 3). It measured 1.32 by .88 m. and had



FIG. 3.—MARBLE GRILLE, FOUND AT THE NYMPHÆUM. (Scale 1:12.)

a moulded border all round. It seems to be of Roman, not Byzantine, date, and probably was used for a window, but it is almost impossible to connect it with the building under discussion. The curved entablature-block already mentioned (p. 8) was found together with it.

The elaborate arrangement for draining this space between the

fountain-basin and the retaining-wall must have been intended to deal with the overflow from the supply of water for the fountain, and enforces the conclusion that this supply was brought ultimately to the massive back wall, from which spouts fed the basin. That the water came from the west, as is proved for a later date by the remains of the aqueduct which supplied mediaeval Sparta, is beyond dispute, but we cannot trace the exact means by which it reached the basin.¹

On the retaining-wall itself certain structural alterations are visible which it is tempting to connect with the building of the fountain. There are three cuttings, each about 40 m. deep from back to front, sunk into the limestone blocks of the wall, and built into each are the remains of a brick pier. The easternmost, just opposite to the inner face of the east end of the basin, is 85 m. wide; the central one, which lies 8.50 m. (on centres) further west, is 1.10 m. wide; and about 9.25 m. to the west again is another, which is 1.25 m. wide. It can be seen from the cuttings in the face of the wall that the first rose originally to a height of eleven courses (*ca.* 4 metres) above the floor-level of the basin, the middle one perhaps one course higher still (*ca.* 4.36 m.), and the third only to the top of the ninth course, for the blocks above this level all have their rusticated face preserved. It is difficult, however, to account for these piers, for their use as buttresses for the brick wall above the basin would not account for the presence of the western pier, which is far beyond the west end of it, nor does it seem likely that a brick wall more than a metre thick and rising only to the height indicated by that of the piers would have been thought to need support of this kind. The lack of symmetry in its position as regards the basin makes it even harder to connect the middle pier with such a scheme.

Nor does it seem likely that we should connect them with the water-supply, for in the first place, if we presume that it came by means of an aqueduct corbelled out on these piers in front of the retaining-wall, our spans of 9.25 and 8.50 m. seem too wide for the strength of the piers, and secondly, there were absolutely no traces of piers for this purpose still further to the west. Nor can we suppose the existence of any system of roofing with which to connect them. If they are contemporary with the fountain, their purpose can only have been decorative, as far as we can tell.

¹ As will be seen below (p. 33), the lion's head may have served as one of the supply-spouts.

On the other hand, in view of these difficulties, the solution will perhaps prove to be that they belonged to an earlier building occupying the same site. We have seen already that the bricks used for the fountain-basin are material intended originally for the *Skenotheke*, and that the inscription supporting the western marble basin indicates a date not earlier than A.D. 250 for its erection, and presumably for that of the fountain as a whole. There is thus no difficulty in the view that an earlier building, of brick, had occupied this site; and that this building was the *Skenotheke* itself is more than probable.

At what level it stood, and whether any portions of it were incorporated in the structure of the fountain-basin, could not be ascertained convincingly without destroying part of the latter. But we need not bind ourselves to the belief that it was of the same dimensions as the fountain, and consequently it may quite well have extended far enough westward to be related to the third pier also. This explanation accounts satisfactorily for the spacing of the piers, and is in no way in conflict with the evidence afforded by the structure west of the basin, which must now be described.

The area west of the basin is bounded on the west by a substantial wall of limestone blocks, measuring .80 m. in thickness inclusive of its marble revetment; on the north by a brick wall built directly against the retaining-wall; on the east by the end of the fountain-basin; and is approached on the south by an opening 2.35 m. wide between two *antae*, of which that on the west had been removed down to the floor-level. The north wall, like those on east and west, has a low marble wainscot, and from the middle of it projects the base of an *anta* of brick, measuring .70 by .60 m. Outside the entrance is a marble pavement, and inside the enclosure at a level .36 m. higher is more paving of the same material, which presumably extended all over it, though it is only preserved at the north-east corner. There were no indications of walls further to the west or south of this region. It gave no evidence of its purpose, and no immediate explanation suggests itself, other than that of a waiting-room for those desiring to take their turn at the basins. It is not clear whether it was roofed over, for there were no tiles found in it, and since, in order to carry the roof, the west wall of the basin would have been built up to the necessary height, the effect would have been most ungainly. The heavy nature of the west wall is appropriate as marking the limit of the buildings

in this direction, and beyond it extended apparently undisturbed earth at a higher level.

The incidental finds were scanty : a poor, headless herm of a youthful Apollo or Dionysos was found built into a later wall running off at right angles from the south-west corner of the basin¹; a broken Corinthian capital, of the 'Tower of the Winds' type, with the acanthus-leaves unusually well cut (lower diam. .28 m.); and a much broken slab inscribed with the name and cities of (presumably) an athlete, who records his citizenship of Selge, Tyre, Sparta and Nikopolis, alone call for mention.

Though many of the structural details remain enigmatic, it is plain that we have here a fountain or Nymphaeum of a simple type, of which few examples have yet been found in Greece, though, in all degrees of elaborateness, they are familiar in Italy, North Africa and Asia Minor.² The essential features are an oblong (or apsidal, or oval) basin with a wall rising high above it on one side, and with arrangements, usually, for drawing off water from smaller basins. The high wall, represented by our thick wall of brick, would normally be treated as a façade with colonnade and entablature, and statues and other decorative sculptures would appear in the intercolumniations, and probably on the lower ledge in front as well. We have not enough preserved to restore the architectural designs of our façade, and our scanty collection of sculptures does not necessarily represent all that the Nymphaeum originally held.

The best-preserved, and most ornate, Nymphaeum in Greece is that of Herodes Atticus, at Olympia,³ but ours has nothing in common with its ornate splendour and wealth of statuary. Nearer parallels are afforded by those found at Gortyn by the Italian Mission, which are pretty nearly of the scale of ours, though neither has the internal apses at the end of the basin.⁴ The better-preserved of them is dated by the finders 'not before the second half of the second century.' As we shall see, there is good evidence for dating ours definitely later still.

The date implied by the re-use of the inscription supporting the western marble basin, which has already been considered, can hardly be

¹ It appears in Plate II standing against the west wall of the basin.

² Cf. Dar.-Sagl., *s.v.* Nymphaeum, which deals mostly with those of Italy and N. Africa. Among well-preserved examples in Asia Minor, that at Side is worth mention (Lanckoronski, *Städte Pamphyliens und Pisidiens*, i., pp. 140 ff.).

³ *Olympia*, ii. pp. 134 ff., and *Tafelband*, ii. Pls. LXXXIII-LXXXVI.

⁴ *Annuario della R. Scuola Arch. di Atene*, i. (1914), pp. 119 ff.

put before A.D. 250; how much later it should be placed cannot be stated on this evidence alone. We must, however, also take into account the indications afforded by the coins, of which 161 in all were found in or immediately around the Nymphaeum. A high proportion of them are identifiable, and the following table shews their chronological distribution :

							Totals.
Greek.	Autonomous :	Sikyon 2 ;	Laconia 4 ;	uncertain 3	.	.	9
"	Imperial :	Laconia, Claudius 1 ;	Antonine Age 2	.	.	.	3
Roman.	Republican and Imperial of first century	.	.	.	.	.	0
"	Imperial :	second century (Antoninus Pius, Denarius)	.	.	.	.	1
"	"	third century, before 250 (Gordian III)	.	.	.	.	1
"	"	third century, after 250 (various reigns)	.	.	.	.	14
"	"	fourth century, including Arcadius and Honorius	.	.	.	.	87
"	"	uncertain, but mostly fourth century	.	.	.	.	14
Byzantine.	Sixth century (Justin I)	.	.	.	.	.	1
"	Seventh to ninth centuries	.	.	.	.	.	0
"	Tenth century	.	.	.	.	.	11
"	Eleventh century	.	.	.	.	.	12
"	Twelfth century	.	.	.	.	.	3
'Crusaders' and Frankish	.	.	.	.	.	.	5
Grand Total .							161

We may ignore the few Greek autonomous pieces, but must observe the remarkable dearth of Imperial coins prior to the middle of the third century, in contrast to the presence of pieces belonging to eight reigns in the next fifty years,¹ and to the high proportion of fourth-century pieces, among which those of Constantius II are most numerous. These figures justify the conclusion that the Nymphaeum may have been built at some date in the second half of the third century, and must have continued in use until about the end of the fourth. The evidence from the Byzantine coins agrees strikingly with that furnished by those from the Theatre as a whole (*B.S.A.* xxvi. p. 157 f.), and it is to be noted that they were almost all found at a high level, associated with remains of houses built over the filled-up basin. It is safe to conclude that in mediaeval times the Nymphaeum was buried and forgotten.

The ground west of the Nymphaeum was not explored down to virgin soil, but enough was cleared to shew that no other building stood there, and careful examination was made of the construction at the outer south-west angle of the retaining-wall. Many blocks have fallen, and the

¹ Volusian 1, Gallienus 3, Aurelian 2, Severina 1, Claudius Gothicus 2, Tacitus 1, Tetricus (?) 1, Maximian 2, Diocletian 1.

south face is not preserved at the actual corner, nor is the original ground-level clearly recognisable. We found the lowest foundation course at the angle, set in undisturbed clay at less than a metre below the modern surface, but just east of it the foundations go down a course deeper, and project further forward; and further east they go deeper still. This fully confirms our conclusion that there was in antiquity a considerable slope from west to east across the Theatre-region, and that the builders made use of it accordingly.¹ The extent of the slope is best conveyed by noting the following figures: (1) the level of the under surface of the lowest foundation-course at the south-west angle is *ca.* 3.12 m. *above* that of the paving west of the Nymphaeum; (2) this in turn is .81 m. higher than the average level of the Parodoi, and of the paving beyond the outer staircase on the east. It is plain, therefore, that this difference of level would have rendered impossible any westward extension of the west Parodos beyond the offset of the bastion; and justifies us in believing that west of the Nymphaeum (and therefore of the *Skenotheke*, which seems to have preceded it on this site) there can only have been a terrace of earth at a level more than three metres higher than its floor.

We have also established the fact, to my own satisfaction at least, that the south face of the west bastion had no marble facing-blocks. It is true that towards the west end of it we found a few fallen marble blocks which by their dimensions might have served as facing-blocks, but in nothing like the numbers fallen from the east wall. On the other hand, it was observed that a large number of the limestone blocks *in situ* in the wall had their faces rusticated. Seeing that there can have been no regular access along the front of the bastion it is likely enough that for economy a marble facing would have been dispensed with, and that such marble blocks as were found may have fallen from the *cavea* above, or have been brought later from elsewhere.

The difference in width between the west bastion, which projects only 2.10 m., and the east with its projection of 3.21 m. must be left unexplained. There seems at any rate no reason to suppose that their original width was equal, and that the western one was cut back to accommodate a later structure. The architect's chief consideration would have been approximate symmetry, and since he had no outer staircase to carry on his west bastion, he may well have felt that identity of width between the two was relatively unimportant.

¹ Cf. *B.S.A.* xxvii. p. 178.

The Stage.

No more excavation remained to be done within the stage-buildings, but a closer examination of certain details has helped to clear up a few, mostly minor, points. The channelled blocks of uncertain purpose found built into the early wall between the *Hyposcenum* and the *Scenae Frons* at its west end (*B.S.A.* xxvi. pp. 148, 150; xxvii. p. 191 f.) proved to belong to a type of which several others have now been recognised at various parts of the site, all re-used.

One is built into the same wall near its east end, but at a level which is higher by one course; at least six more are built, some upside-down, into the south wall of the western room behind the stage (*op. cit.* xxvii. p. 198 f.), in particular close to the doorway; and another was recognised alongside the westernmost plinth at the junction of the *Scenae Frons* with the later return on the west.¹ Moreover, the block first mentioned cannot after all be *in situ*, for that which adjoins it on the west is not channelled, and consequently we must reject definitely Professor Dörpfeld's interpretation of this as evidence for a *Scaena ductilis* (*op. cit.* xxvii. p. 192, note 1). Nothing more can be said of these blocks than that they must have belonged to a rain-water channel connected with some early form of the stage-buildings, of which the precise position cannot be located.

Among other re-used material in the walls of the rooms behind the stage we recognised and extracted a piece of a Doric architrave-block with *guttae*, of which the full height was not preserved; but the scale and style of dressing prove that it can well have belonged together with the triglyph-block mentioned in the last report (*op. cit.* xxvii. p. 199); and it seems highly probable for the same reasons that the broken-up Doric column-drums used in the foundations of the *Scenae Frons*² belonged to the same building. It is tempting to connect this Doric colonnade with the Theatre, but we have no evidence for its position; and on stylistic grounds it would not be easy to decide whether to ascribe it to the late Hellenistic or the early Imperial era.

In contrast to this order, it is not even yet possible to publish a restored elevation of the Corinthian order decorating the stage-front at any period, chiefly owing to the diversity of the material; for we have at

¹ It shews, though not very clearly, above the angle of the marble revetment in *B.S.A.* xxvi. p. 148, Fig. 12.

² *Op. cit.* xxvi. p. 144.

least six types of capital of various sizes, none of which is represented by more than two examples, and to only two of our four patterns of column can capitals be even tentatively allotted. Architraves and cornices are plentiful, but some types are represented by one block only; and here again there are several pieces of the former which could not be combined with any of our capitals.¹

East and South of the Stage-Region.

We cleared a strip nearly five metres wide parallel with the east wall of the stage-buildings, but the results were unimportant. At a distance of about 4.25 m. north of the street behind the stage we uncovered a step, rising from north to south, .15 m. high, but did not reach its eastern extremity. If prolonged for about half a metre further in this direction it would have intersected a line prolonging that of the step in the east Parodos (*op. cit.* xxvii. p. 181 f. and Fig. 1). To north and south there were scanty remains of a marble pavement, which above the step was set on a specially tough cement bedding. This was further examined in 1928, and we found that the step, measuring .15 high and .33 m. from back to front, rested on a well-finished marble plinth-course, .22 m. high, with drafted margins, and projecting .07 m. from the course above; this in turn rested on a foundation of heavy cobbles, .53 m. deep, which projected .27 m. from the plinth-course. The plinth was not *in situ*, as a cramp-hole to the left of a joint had no corresponding one opposite, and a patch of brick-work adjoined it on the extreme right.

In clearing this step we were able to verify also that the early wall found below the floor-level of the rooms behind the stage (*B.S.A.* xxvii. p. 190) did not run further east than their east wall, and in clearing the continuation of the Orchestra-drain no trace of it could be seen. Proceeding further southwards we examined more closely the wall mentioned in my last report (*op. cit.* p. 203), which projects eastwards from the south-east corner of the east room. It is 1.45 m. thick and the south half of the uppermost of the two courses preserved above the footings consists of fragments of engaged *poros* columns, with stucco-facing, placed end to end, flutes inward, the remainder being built of rubble and miscellaneous worked blocks of stone and marble, on a lower course of good limestone

¹ I hope to discuss these, and publish Mr. De Jong's drawings, in the next volume.

blocks. This does not bond into the buttress from which it returns, and must therefore be a later addition, which would, be it noted, block access to the street behind the stage-buildings along the space in which is the step described above. This street has been mentioned in my last report (*op. cit.* p. 202), and we need only add here that we located it again in a cutting made south of the entrance to the central room behind the stage.

South of the street we cleared the massive ashlar wall which continues the line of the south-east buttress (Figs. 4, 5). After running for 9.15 m.



FIG. 4.—BUILDING SOUTH-EAST OF THE STAGE; ROAD AND DRAINS IN FRONT.

it ends abruptly, and a narrow interval (*ca.* 1.20 m. in width) between it and the north face of the late Roman fortification-wall is blocked with poor rubble. As the photograph (Fig. 4) shews, it is built of carefully dressed large limestone blocks, the courses being of varying height, fitted without mortar, and is exactly similar in width (1.42 m.) and construction to the buttresses south of the rooms behind the stage.

The impression given is that wall and buttress were originally a continuous wall, through which the street was cut later, but on the whole this seems improbable; though we cannot doubt that the two are contemporary and part of one plan. We found no return contemporary with

this wall, for the eastward return at its north end must be a later addition; though the masonry is somewhat similar there is no bonding at the angle, and, as the illustration shews (Fig. 4), the horizontal joints are not level



FIG. 5.—BUILDING SOUTH-EAST OF THE STAGE: WEST WALL, WITH WAINSCOT, LOOKING NORTH.

with those of the main wall. In the angle contained by these walls is a floor paved with a mosaic of large *tesserae*, shewing a dark blue border of connected lozenges on a white ground; not enough was cleared to inform us if it had a central motive. The walls have a projecting wainscot, marble-faced, and had a marble revetment above it (Fig. 5). This pave-

ment clearly belonged to a large room, for we found it again in a pit sunk just against the north face of the fortification-wall; but here it was much damaged. A trial further east found the pavement again, but no east wall to the room; on the other hand, it shewed it to be bounded on this side by a brick wall belonging to a quite different building, of apparently earlier date, of which we uncovered the north-west corner only. This wall was .83 m. wide, with a projecting marble plinth resting on a solid ashlar foundation-course, and the space enclosed had a floor paved with square brick-tiles at a level of .17 m. below that of the mosaic on the west. The north wall of this building was not at right angles to the ashlar wall, but seemed to be laid out parallel to the late Roman fortification-wall, which is built of good brick-work, as regards its lower courses, in this vicinity; and we may confidently assume that here it incorporates an earlier structure. It seems equally probable that the mosaic pavement east of the ashlar wall is definitely later than this brick building, though we have no sure evidence for an absolute date for either.

West of the ashlar wall we dug deeper, attaining a level two metres deeper than that of the Orchestra-floor, before reaching the bottom of the wall. At 1.72 m. below the average level of the uppermost course preserved is a wainscot, resembling, and flush with, that on the east face, but we found no traces of a corresponding pavement.

Then came two foundation-courses with a total height of .73 m., and they in turn rest on a rubble footing. Level with the top of the wainscot is a flying buttress formed of a single block of dressed stone (.39 m. deep and .35 m. wide) which projects .70 m. from the face of the wall and is keyed into a wall opposite, where it rests on a stone block let into the brick face. This buttress is 2.40 m. north of the north face of the fortification-wall, and about two metres further north was a cutting for another of the same type. The space thus spanned is paved with tiles which extend southwards as far as the fortification-wall, and is .42 m. in width. On the west it is bounded by a brick wall standing to a height of 1.25 m., of which we did not reach the west face; nor did we follow it to its north end, which presumably reached at least as far as the street behind the stage region. At its south end it came to within .50 m. of the face of the fortification-wall, but did not seem ever to have been bonded into it. Without further clearing we could not ascertain if the two belong to one structure, though this is highly probable.

The incidental finds in this area were disappointingly few, and the only substantial piece of an inscription, a fragment of a decree of perhaps the first century B.C., was found at the Byzantine level. In view of the fact that at our deepest point we reached nothing earlier than a Roman tiled floor, some eighteen feet below the modern level, it would have been a mere extravagance to uncover more of this area with the funds at our disposal. In the circumstances no conclusions can be drawn as to the exact date or purpose of these buildings, but we have established the following chronological sequence: (1) brick building, of which the south wall was (probably) incorporated later in the fortification-wall, with tiled floor at 219.47 m. to east of it; (2) brick building, on stone footing, further east, enclosing tiled floor at level of 221.47 m.; (3) ashlar wall running north-south; (4) return added later to (3) to enclose large mosaic pavement at level of 221.64 m. Now (3) seems, as stated above, to be contemporary with the buttresses attached later to the building behind the stage, for which building I suggested in my last report *ca.* 300 after Christ as a possible date. In this event the earliest possible date for the ashlar wall (3) would be the early fourth century, and (4) must be later still. We cannot arrive at even an approximate date for the brick buildings (1 and 2), nor would it be other than guess-work to suggest that (3) was built to replace (1) in a general remodelling of this region.

It remains to add that a trial made further west opposite the south-west corner of the rooms behind the stage shewed the presence of a wall similar to (3), and likewise continuing the line of the angle buttress to the southward. This later formed part of the substructure of the fortification-wall at the point where it still stands high above the present ground-level. What other walls belonging to, or earlier than the system represented by these two massive walls of ashlar may exist in the wide space between them could only be discovered by further extensive digging, at the risk of failure to achieve results of archaeological or topographical value. Enough, however, has already been done behind the theatre to shew that the prospects of finding Hellenic remains *in situ* are remote and, it must be confessed, discouraging.

APPENDIX.

Sculptures from the Theatre and the Nymphaeum.

As my account of the Nymphaeum would not be complete without some description of the sculptures found in it, I take the opportunity of adding to them the principal pieces of sculpture found during our four seasons at the Theatre. It will be readily understood that they represent only a small selection from the total number found, but as the remainder consist mostly of broken fragments from statues large and small, draped and undraped, and some hopelessly mutilated heads, none of which seem earlier than the Imperial period, there is little prospect of reconstructing any of these works; and even if reconstructed scarcely one would deserve detailed publication. Of those published here we cannot claim that any is of great value, but the fragmentary Hero-relief (No. 1), the Apollo-torso (No. 2) and the better-preserved portrait-head (No. 3) deserve attention as interesting examples of the types which they represent.

1 (M. 4476)¹ (Pl. IV). Hero-relief, of fine-grained grey marble, with surface weathered. Broken above, below and on left. H. .23; br. .23; depth of relief .018. (Found above the east external staircase, 1926.)

A male figure is represented, seated to left on a throne. He lacks head and neck, and the left leg is missing from midway down the shin; the right leg was not visible, and the right arm is lost, as is the upper part of the back of the throne. Details of his costume are not clear, but apparently no under-garment is shewn; the himation seems to fall vertically from the left shoulder, and to be pressed against the side by the left fore-arm, from which it hangs down outside the arm of the seat in five rigid parallel folds, ending on a concave line below.

The throne is apparently of the type found usually on the earlier reliefs of this class, with a high sloping back and the back legs shaped like the hind legs of an animal;² of the front legs not enough survives for us to determine their shape. It has, moreover, an unique feature in the presence of a Gorgoneion facing outwards as an arm-support;³ whether

¹ The number enclosed in brackets is that of the excavation-inventory of marble objects.

² Cf. *S.M.C.* pp. 102 ff., Figs. 1 and 3.

³ A seated sphinx is often employed as an arm-support, *e.g.* on the Harpy Tomb, Richter, *Ancient Furniture*, Fig. 62, and on the Demetria-Pamphile grave-relief in the Ceramicus, *ibid.*, Fig. 66; but I can find no Gorgoneion used for this purpose.

there was also the usual lathe-turned support for the same purpose is not plain, but the arm ends in the common semicircular disc, and there seems to be a cushion on the seat. Just enough of the back leg is left to shew that it set in again forwards, completing the resemblance to an animal's hind leg. At first sight it might appear to be complete, but this cannot be the case, for *θρόνοι* do not usually have plain splayed legs, which are characteristic of *κλισμοί*; ¹ as, however, a seat of the latter type is unknown on such reliefs, and as also they are without arms, there can be no question that our example represents a *θρόνος*, with the typical hind legs. This involves the presence of a footstool, since otherwise the hero's legs would be disproportionately long below the knee; for this feature the Chrysapha relief supplies a parallel. ²

As far as can be seen from its incomplete condition, this relief comes early in the series; all its features suggest archaic work, and the stiff and shapeless arm, lying flat on the chair-arm, and the formally treated himation seem decisive for the sixth century as its date. No other example exhibits the himation hanging *in front* of the arm of the throne, but otherwise the motive is similar to that of S.M.C. 4 and 505, of which it more closely resembles the latter. On the still later Timokles relief at Dhimitsana ³ this feature reappears in a stylised form.

On the whole the closest parallel is S.M.C. 505, which Mr. Wace regards as archaising work of the fourth century—a verdict disputed recently by Miss Richter, ⁴ but justified on the evidence of the horse (if this is not, by chance, a later addition). This similarity need not, however, in any degree involve our dating ours to the fourth century; and it will take its place, I feel confident, among the sixth-century pieces in Mr. Wace's list ('Group I,' S.M.C. p. 108). ⁵ The fact that the Hero is seated to the left, instead of to the right, as in the other examples attributed to the sixth century, must not be permitted to outweigh the stylistic evidence for the earlier date.

2 (M. 3989) (Fig. 6). Torso of white (Pentelic?) marble. H. ca. 1·10. Missing: head and part of neck, both arms and legs; the left leg is broken off close to the groin, the right a few cmm. lower. (Found

¹ Richter, *op. cit.*, pp. 45 ff.

² S.M.C. Fig. 1; cf. also S.M.C. 505, Fig. 10.

³ S.M.C. p. 105, Fig. 6.

⁴ *Op. cit.* p. 10, note 3.

⁵ For the relation of these reliefs to other works of archaic Spartan art see Langlotz, *Frühgriechische Bildhauerschulen*, pp. 90 ff.

at a low level, as if intentionally buried, in front of *Scenae Frons* towards west end, 1924.) A considerable number of sculptured fragments of similar marble came to light close at hand ; among these the arm shewn

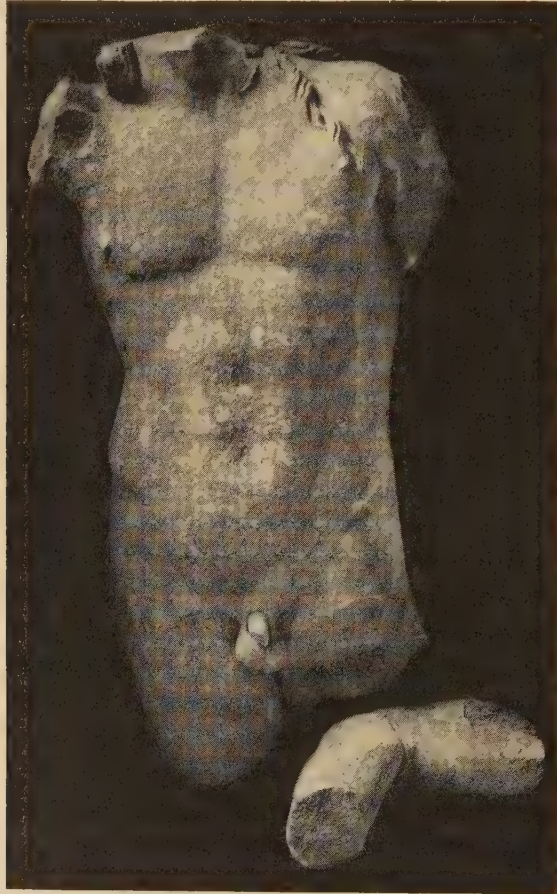


FIG. 6.—TORSO OF APOLLO LYKEIOS. (Scale 1:11.)

in the photograph may very well belong to the torso, but it does not make a clear join.

It is not difficult to restore the attitude of this figure in its essentials : the right arm was clearly raised and the left hung down, perhaps with the elbow resting on a low support ; the right leg was the 'Standbein,' and

the head was turned slightly towards the left. The stalwart proportions and the locks of hair falling on to the shoulders proclaim the figure to be Apollo; we must rule out Dionysos as the type is too virile, indeed it is unusually heavy for an Apollo.

Among known Apollo-types there is only one which can be represented here, namely, the Lykeios, of which two versions are distinguished, according as they have or have not locks falling on to the shoulders.¹ The essential features are the right arm raised and resting on the head, the left arm held downwards or resting on a support, and the absence of drapery from the body. Overbeck, in discussing the former version,² describes four copies differing in details, and none of them free from restoration, namely :

- (1) Wilton House. Michaelis, No. 1b (Creed, No. 36; ³ Clarac, Pl. 693, 1635 B);
- (2) Holkham Hall. Michaelis, No. 21 (= Clarac, Pl. 494 B, 912 F);
- (3) Rome, formerly Coll. Vescovale (= Clarac, Pl. 479, 919), now lost(?);
- (4) Munich, Glyptothek, 226 (= Clarac, Pl. 678 B, 1583).

Of these, No. 1 is much restored, and Michaelis says the left hand must have held the lyre or bow and quiver; No. 2 has the left arm resting on a tripod; No. 3 has it resting on a lyre on a tree-stem (whether this be a restoration or not cannot be decided until the statue is refound); No. 4 has the head and many other elements restored as those of Dionysos, and the left hand resting on a stem holds a wine-cup, but it seems nevertheless to be really an Apollo, and Furtwängler confirms Overbeck in this attribution.⁴

Another possible replica, in the Uffizi (Dutschke, *Ant. Bildw. in Oberitalien*, iii. p. 19, 48 = Clarac, Pls. 482 D, 968 C and 491, 953), is now thought to be Dionysos, not Apollo, in view of the greater luxuriance of the shoulder-locks.

¹ The *locus classicus* for this statue is Lucian, *Anacharsis*, c. 7, καὶ τὸ ἄγαλμα δὲ αὐτοῦ ὄρῃς, τὸν ἐπὶ τῇ στήλῃ κεκλιμένον, τῇ ἀριστερᾷ μὲν τὸ τόξον ἔχοντα, ἡ δεξιὰ δὲ ὑπὲρ τῆς κεφαλῆς ἀνακεκλασμένη ὥσπερ ἐκ καμάτου μακροῦ ἀναπαυόμενον δείκνυσιν τὸν θεόν.

² *Apollo*, pp. 212 ff., Class X. e, 1. For the other version cf. also Furtwängler, *Masterpieces*, p. 337, note 2; for another replica, from Gortyn, *Mon. Ant.* xviii. p. 256 f. and Fig. 34.

³ The drawings in Creed's description of the Pembroke collection (published in 1731) are shewn reversed; cf. Michaelis, p. 665.

⁴ In his catalogue of the Glyptothek.

Our copy is unfortunately too much damaged to shew what the left arm was doing, though the angle of the shoulder would suit the pose with the elbow resting on a low support. Whether or no the one illustrated belongs to the statue, we cannot doubt that the right arm was raised and rested on the head. The treatment of the hair seems to differ slightly from that of any other replica, which need not surprise us. No other shews the lock on the right side curving up again from the collar-bone, and apparently not touching the front of the right shoulder at all; and the lock on the left shoulder comes nearer to the arm-pit than appears in the reproduction of any other version.

The modelling is vigorous and robust, and the photograph enables us to dispense with a fuller description of the treatment of details. We must, however, note that the surface never received its final polish, being left with an appearance suggesting that it was worked over in the last place with a rasp, as can be well seen on the left breast. This defect would have been less noticeable if the figure stood on a high base, but is not easy to account for; it was observed that other sculptured fragments found at the Theatre were similarly treated.

One naturally hesitates to assign an exact date to an incomplete copy, but it has sufficient merit for us to put it not later than the reign of Hadrian, and it might very well be work of the Augustan period. In any case it is of importance as an unrestored copy of a work which must belong to the circle of Praxiteles, even if it does not solve the problems concerning the action of the left arm in the original.¹

3 (M. 4856) (Fig. 7). Portrait head, of about life-size. Greyish marble, shewing white when fractured. Broken off at junction with neck; in addition to slight surface-injuries above the left ear and near the outer corner of the left eye, caused at the moment of discovery, the tip of the nose is lost and the chin and left eyebrow are abraded. H. over all .265; breadth across ears .196. (Found close to central doorway of rooms behind the stage, May 1926.)

This portrays a man in early middle life, with low but not retreating

¹ In this connection it is worth calling attention to the Laconian coin-type of Claudius, which I have not found published, with the Emperor's head sometimes to r., sometimes to l., and as reverse Apollo standing with r. arm on his head and l. resting on a column. The l. arm seems to hold a cloak, but the legs are crossed. (Two examples were found on the Acropolis, one at the Theatre.) In the circumstances this could hardly be meant to represent our statue.

forehead, full cheeks and heavy jaw. His hair is cut short and rendered in summary fashion in short crisp curls; his beard and whiskers are shewn as even shorter, and he has a small moustache trimmed clear of his mouth, and projecting beyond the ends of his upper lip. The ears are set rather high, and very close to his head. The eyes are deep set in thick lids which do not join at the inner angles, and at the outer the upper lid overlaps the lower; the eyebrows do not nearly join across the nose, and



FIG. 7.—PORTRAIT, OF LATE ROMAN AGE.
(Scale 1:4.)

are carried in a prominent ridge beyond the outer ends of the sockets. The treatment of the eyes is striking, for the iris is indicated by a segment of an incised circle intersected by the upper lid, and the pupil by a small, deeply cut segment close under it.

The subject is unknown. The features do not resemble those of any Emperor known to us, and if, as seems probable, this is a portrait of a Spartan worthy of the later Imperial period, we have no clue to his identity. The style is sufficiently characteristic to indicate as an approximate date the middle of the third century after Christ. The artist has tried, and not

entirely failed, to express his subject's appearance and character by a more or less exact portrayal of the features, avoiding undue emphasis of any. He gives due value to the round type of the head, the low, furrowed forehead, the level-set eyes, the curiously straight line of the mouth and the lines running downwards from the nostrils. The heavy lower jaw and the suspicion of a double chin are neither reduced nor exaggerated. There is no attempt at heightening his effect by the interplay of light and shade. In other words, a sculptor of no great talent is portraying a rather coarse-featured subject just as he sees him; and he has achieved considerable success.

For the treatment of the hair—which no doubt represents the fashion of the period—we may compare the portraits of certain emperors of about the middle of the third century, especially the Philippus Arabs in the Vatican,¹ the Balbinus at Boston² and the Trajanus Decius in the Capitoline Museum.³ The rendering of the eyes is more interesting, for whereas the typical third-century treatment consisted in the use of an incised line for the outline of the iris, with two deep dots side by side for the pupil,⁴ our sculptor uses for the latter a small and deeply cut segment of a circle. This convention is very seldom used before the fourth century, when it seems common. We have it, for instance, in the colossal head of Constantine the Great in the Conservatori courtyard,⁵ in another unidentified head in the same collection,⁶ and in the portrait of Dogmatius in the Lateran,⁷ which is dated by its inscription between 323 and 337. This head exhibits, moreover, the same treatment of the hair as the present head, but in a more stylised form, and clearly belongs to a period when a different and more abstract ideal of portraiture had arisen, which dominates the portrait-artists of the fourth century. A comparison of the Dogmatius and our Sparta head makes it plain how wide and deep is the gulf that lies between them.⁸

¹ Braccio Nuovo, Amelung, *Cat. I.* 124 and Pl. 20.

² Caskey, *Cat. of Gr. and R. Sculpt.* No. 134.

³ Sala degli Imperatori, 70; cf. *Die Antike*, II. Pl. 6.

⁴ Cf. E. Strong, *Roman Sculpture*, p. 374 f.

⁵ Cortile, 2; *Conservatori Cat.*, ed. H. Stuart Jones, Pl. I.

⁶ Galleria, 19; *op. cit.* Pl. XXX.

⁷ *Die Antike*, II. Pl. 9.

⁸ For discussion of later Imperial portraiture see, in addition to Mrs. Strong's *Roman Sculpture*, Riegl's paper, in *Strena Helbigiana*, pp. 250 ff., and G. Kaschnitz-Weinberg, *Spätromische Porträts*, *Die Antike*, II. pp. 36 ff. with admirable illustrations.

4 (M. 3964) (Fig. 8). Portrait-head of similar style, with neck cut round below for insertion into a socket. The features are much injured, the nose and lips being almost entirely lost. H. ca. 35. (Found in the northern of the two cisterns of Byzantine date built behind the east end of the *Scenae Frons* (*B.S.A.* xxvi. p. 152), 1924.)



FIG. 8.—PORTRAIT, OF LATE ROMAN AGE.
(Scale 1:4.)

The treatment of the hair, the heavy eyelids, and the general effect conveyed, in spite of its damaged condition, shew a strong resemblance to those of the previous piece, and indicate a date closely contemporary with it. We may note further the extension of the superficially rendered beard down on to the throat, which is also typical of the period concerned.

Differences in the proportions of the face and in the angle of the eyes cannot conceal the essential similarity of the style.

Here again it seems more likely that we have a portrait of a local celebrity than of an Emperor, and we have no clue to his identity.¹

5 (M. 5105) (Figs. 9, 10). Headless draped female statue, on plain plinth. White (Pentelic?) marble. Slightly over life size. H. 1.674 over all; plinth .06. Missing: head and neck (inset separately); left hand, and small pieces of drapery, which were attached separately,



FIG. 9.—PRIESTESS (?) OF IMPERIAL PERIOD. (Scale 1 : 23.)



FIG. 10.—THE SAME FIGURE, BACK VIEW, AS FOUND.

from between right elbow and breast, from above left wrist, and at outer left corner of cloak. (Found face-downwards in front of east Parodos-wall, at deep level, 1926.)

The lady is clad in a long chiton reaching to her feet, on which she wears pointed shoes, and an himation reaching nearly to her ankles, in which her right arm is entirely enveloped. Her left hand, which alone shewed from beneath it, seems to have rested on her hip.

¹ There is a certain resemblance to the Boston Balbinus (*v. supra*, p. 28, note 2), but not close enough to make the identity at all probable.

The drapery is treated superficially in shallow folds in front, and at the back in a very sketchy manner, with a few oblique folds. The back view shews an almost rectangular section (cf. Fig. 10), and justifies us in believing that it was not meant to be visible, the statue having stood presumably in a niche or against a wall. It belongs to a common type, and being but a mediocre example of it, needs no further comment.¹ It probably represented a priestess or other benefactress of Sparta at a date which can hardly be put earlier than the third century after Christ.

6 (M. 5251) (Fig. 11). Small head of Athena wearing helmet. White (Pentelic?) marble. H. .115. (Found deep down near outer



FIG. 11.—HEAD OF ATHENA FROM A MARBLE STATUETTE.

south-east angle of retaining-wall, 1927.)² The goddess wears a helmet with a frontlet-band rising to a peak in front and ending in volutes, and with a low and superficially rendered crest-ridge. It comes low on the back of the neck, where the hair is roughly indicated on each side. The modelling of the face is moderately good: the eyes are deep-set, the nose straight with the brow, and the mouth smallish, with a deep-cut drill-hole at each corner, giving a rather petulant expression. A small dowel-hole

¹ Compare the long series of female statues of the Imperial age reproduced in Reinach, *Rép.* ii. pp. 665 ff.; most of these have the right hand exposed, but vary little in essentials from our example. Of similar statues in the Sparta Museum, S.M.C. 443 and 616 shew a bolder and more effective handling of the drapery, No. 709 is on about the artistic level of our example.

² Cf. p. 5 f.

in the neck shews that the head was made separately from the body. Roman age work, based, perhaps indirectly, on a good original of the fifth century in the tradition of Pheidias.

Nos. 7-12 are from the Nymphaeum.



FIG. 12.—LION FROM THE NYMPHAEUM.
(Scale *ca.* 1:12.)

7 (M. 5168) (Fig. 12). Seated lion on low base. White (Pentelic?) marble. H. over all 1.18; br. across chest .33. (Found in basin of Nymphaeum, having presumably fallen from ledge on north side, 1927.) The lion looks to the front, and is sitting upright, with chest rounded and protruding. The fore legs, which shew little modelling, are rectangular in

section and disproportionately long for the body. The back has little modelling and the ribs are conventionally indicated by shallow grooves. The tail curls up, and down again to the left side. The head, which seems too small for the body, is treated more carefully, but still superficially; the eyes are more human than leonine, with deep shadows at the inner corners, and a downward sweep of the upper lids at the outer; the eyeballs are prominent but flattened. The hair rises in short locks on the forehead, and is rendered on the neck and shoulders in shallow incised locks. The mouth is open, and at some later time a hole has been pierced from the back of the neck to make it serve as a water-spout.



FIG. 13.—BOAR FROM THE NYMPHAEUM. (Scale *ca.* 1:8.)

Lions in this attitude are rare in comparison with the standing type, though they include some well-known examples, such as those from the Piraeus, now at the Venice Arsenal,¹ the Chaeronea lion, and a small figure in the Vatican.² We can trace no influence from any of these on ours, which seems the work of a sculptor who had no very clear idea of a lion's anatomy; and perhaps deliberately tried to incorporate in his lion something of an archaic seated sphinx.³ We must be content to class it as inferior decorative work of the Imperial period.

8 (M. 5195) (Fig. 13). Running wild boar. Blue-grey Laconian

¹ Reinach, *Rép.* ii. p. 714.

² Sala degli Animali, 212; a small and rather mild beast.

³ A suggestion for which I am indebted to Professor Droop.

marble. L. from snout to tail .88. (Found a little east of the previous item, 1927.) The beast is represented as running with legs outstretched. It was made in one piece with its base, which was found separately, split through longitudinally; on it are preserved three of the feet, the fourth being found later. There is a central support under the belly. The coat is covered all over, down the legs as well, with shaggy curls, arranged evenly across the body. The mane, which runs straight from head to tail,



FIG. 14.—SMALL HERM OF HERAKLES FROM
THE NYMPHAEUM.

with a short gap at the middle of the back, is treated like the rest of the coat, not with bristles. The tail curls into a small loop.

The head is well modelled, though the eye is rendered more like a human eye, with heavy brow and upper lid brought down over the outer corner; the eyeball is prominent and rounded, with a circular sinking for the pupil. The partly open jaws add to the ferocity of the expression. This is a much more formidable beast than the lion, and deserves to rank

with the spirited boar which is fighting with a panther in the Conservatori Museum.¹

9 (M. 5158) (Fig. 14). Small Herakles-herm. White marble. H. .23. Lacks head and shaft from below bottom of cloak. He wears the lion-skin like a heavy cloak over both shoulders, with both hands wrapped in its folds, the right on his chest, the left on his hip; one paw projects from beneath his right hand, and the head is shewn low down on his left side. Coarsely finished, conventional work of the later Imperial period, in imitation of the type represented by the Herakles-herms from Arapissa, now in the Sparta Museum.²

10 (M. 5196) (Not illustrated). Tritoness. White marble. Length .72. The figure lacks everything above the waist, and of its arms only a fragment was found separately. The tail is broken into four pieces. It had an upright body emerging from two rows of rough acanthus leaves across the hips, and terminating below in a long tail, with double curl, which rests on the ground; at the extremity is a poorly modelled fish-tail.

A similar figure, apparently male, is in the Sparta Museum (S.M.C. 136); both are poor decorative work of the Imperial period.

11 (M. 5170) (Fig. 2, *supra*). Marble seat without back, in the form of a solid rectangular block with ornamental legs. Grey Laconian marble. H. .50; br. .61; depth .46. The top is not dressed smooth, and a circular portion of it which is left rougher than the rest perhaps indicates that it was once used as a base for some other object.

The legs are in the form of those of a lion, decorated above with acanthus leaves growing downwards from below the seat. On the front panel is carved in relief an eagle with wings half-spread and head to right, struggling with a snake, of which it holds the coils in its claws and prepares to strike with its beak at the head, which rears up towards it.³ On each of the side panels is a palmette springing from a wide acanthus leaf; the palmette on the left has the leaves turned outwards, that on the right inwards. Spirited, but conventional, work of the Imperial period.

Seats of this pattern are perhaps descended from the Greek solid stool in the form of a plain wooden box; and we may suppose that in time

¹ Giardino, 101.

² S.M.C. 442a, 442b; B.S.A. xii. p. 412, Fig. 2.

³ Perhaps this is a reminiscence of the Elis coin-type, Seltman, *Temple Coins of Olympia*, p. 42 and Pl. iv. BN; P. Gardner, *Types of Greek Coins*, Pl. viii. 22. Seltman dates it ca. 432-ca. 421.

a tendency to decorate the corners developed into the practice of imitating the legs of a *θρόνος*.¹

This, and the next three items, are presumably brought from the Theatre, where two more similar seats were found (see above, p. 8).

12a (M. 5169). Similar seat, but without acanthus leaves at top of legs. Front panel plain, and at sides simple motive of vertical stem with two curved shoots flanking it. H. .44; br. .61; depth .46. (Found *in situ* at west end of ledge on north of basin.)

12b (M. 5171). Similar seat, with three corners damaged. Front panel plain, two superposed acanthus leaves in each side panel; lion's legs, with acanthus leaves above. H. .455; br. .61; depth .31. (Found in basin near east end, and now replaced on ledge.)

12c (M. 5221). Similar seat, except for slight variety in treatment of side panels. H. .48; br. .68; depth .42. (Supports the westernmost of the marble basins in front of the south wall of the main basin.)

A. M. WOODWARD.

¹ Cf. Richter, *op. cit.*, p. 44, for this type on vase-paintings. In any case, when made of marble, owing to its cumbrous nature it must always have been more of a 'fixture' than a piece of domestic furniture.

EXCAVATIONS AT SPARTA.

§ 3.—THE ACROPOLIS, 1926–27.

(PLATE V.)

THE principal results of the work of the first two seasons on the Acropolis were described in the *Annual* two years ago (xxvi. pp. 240–76), and it remains to complete the account for the two following years (1926–27). The task is fairly simple, since the main features of the stratification of the area which yielded finds of predominantly Hellenic date have been already described, and the results obtained from the other parts of the Acropolis which we explored are of much less interest and importance, and can be dismissed briefly. The Byzantine church on the eastern spur of the main summit must be reserved for a separate report.

(a) *The Excavation.*

Comparison of the plans made in 1925 and 1927 will shew that in the region situated between the south wall of the Chalkioikos Sanctuary and the retaining-wall at the back of the *cavea* of the Theatre there still remained undug after our second season a central strip varying between five and eight metres in width from east to west, and south-west of it a larger mass of earth about twelve metres wide and increasing in length from about five to ten metres as it followed the curve of the retaining-wall in a south-west direction. A little supplementary clearing was also required around, and below the level of, the late Roman house-walls to the south of the Portico cleared in 1924 (*B.S.A.* xxvi. pp. 241 ff.). Work could not proceed quickly and our number of men had accordingly to be limited, because the nature of the terrain made it difficult to find an easily accessible dumping-ground; and when the prolific strata were reached, slow and careful digging with knives or small picks was essential. Moreover, there was no escape for the winter's rains from the deep hollow left in 1926, and the deeper levels had to be left

alone the following year until the water had evaporated and the clay below had dried enough to permit digging. By the end of 1927 we had practically completed the clearance of all the votive deposit in this area, and the narrow and shallow strip which we left at the south-west corner, beneath the retaining-wall, seemed unlikely to repay the cost of removal.

The nature of this votive deposit agreed on the whole with the expectations formed as a result of our first two campaigns; and we confirmed the conclusion that the greater part of it was imported filling



FIG. 1.—FOUNDATIONS OF EARLY SANCTUARY, LOOKING WEST.

containing objects of very different dates.¹ The lower portion was, as a rule, dark in colour and varied in thickness from about 50 centimetres to a metre; above it was red clay, streaked with yellow, of which the lower levels were uniformly quite unproductive, whereas in the uppermost metre and a half finds, especially of pottery and bronze, were fairly plentiful, and ranged in date from Geometric down to early Imperial times. The presence of a few sherds which seem undoubtedly of Mycenaean fabric, mostly found in 1926, in the dark deposit, compels

¹ *B.S.A.* xxvi. p. 251 f.

us to conclude that the occupation of the site had in some measure begun in the second millennium B.C.

The most important result of these two campaigns was the discovery, in 1926, of the foundations of a building of Hellenic date, situated south of the Chalkioikos-wall at a distance measured from the nearest point of 13.5 metres, and orientated approximately south-east and north-west; its average level is about six metres vertically below that of the upper Sanctuary.¹ In the first season we cleared most of the north wall, and some 2.5 metres of the west wall; and in the following year completed the task, and found that the north wall was the only one preserved for its whole length, namely, 9.4 metres. The west wall was preserved for 3.9 metres only, from the north end, and the east wall, except for a couple of fallen stones which were in their approximate original position, only extended about 1.50 metres from the north-east angle; of the south wall no trace had survived. In the section reproduced (Pl. V) the position of the south wall is shewn conjecturally, giving to the building an external width of 4.9 metres, on the evidence of the extension of the votive deposit, of which we reached the definite limit in a south-east direction. The surviving walls are seen in Fig. 1.

The walls, which consist of foundations only, measure .60 metre in height and thickness, and stand, where best preserved, to a height of three courses. They are built of carefully laid cobbles and small unworked stones bedded in clay, with larger, roughly trimmed blocks at the angles. The central portion of the north wall had been disturbed by the drains, of which the course further to the north was described in my first report (*B.S.A.* xxvi. p. 251). As the plan (Pl. V) shews, the upper drain-channel, which is cut into the top of the dark deposit, continues its course practically due south, and runs through the wall, with its bed level with the top of the lowest course, so that the two courses of foundation above this have been removed. The lower drain, which is cut into the virgin clay below the deposit, is at one point north of the wall as much as .90 metre deep, but further south, inside the building, it diminishes gradually, to barely .60 metre, though its width, *ca.* 1.10 metre, varies little. It changes its direction curiously just after passing

¹ My account of the results obtained in 1926 owes a great deal to the careful records kept by Mr. G. A. D. Tait, who supervised the work on the Acropolis throughout that campaign.

the north wall, and turning south-west converges towards, and then crosses, the line of the upper drain. In it, both north and south of the wall, was a filling of brownish earth, rather damp, and containing objects of very various dates, including Geometric sherds, further pieces of Hellenistic relief-kraters,¹ and one or two pieces of coarse pottery of early Imperial date. There seems thus no doubt, in view of the composition of the filling, that the lower drain must have remained open to a date long after the collapse of the building through which it runs. It seems incredible that the channel can antedate the building, in spite of being sunk deeper into the undisturbed clay than the foundations of the north wall.

The slope on which the building stands had been partly, but not fully, levelled to make a flat terrace for it, and it is possible that the steep fall noticed in 1925 in the slope of the virgin clay, and marked as 'Pit' in the plan accompanying the first report (*op. cit.*, Pl. XVII), represents part of this levelling process; an eastward extension of the same feature was recognised in our two later campaigns, and just north of the north wall of the building, the clay had been levelled off horizontally for a width of 1.05 metres. Nevertheless the builders did not achieve a perfectly flat platform, for the north wall sinks steadily eastwards, its top course at the north-east corner being more than .50 metre lower than at the north-west, and the west wall also runs appreciably down-hill, following in each case the natural fall of the subsoil.

The walls which stood on these cobbled foundations must have been of sun-dried brick, of which traces remain in a layer of reddish-brown clay found in places inside the building, and we found plenty of clay tiles in fragments on both sides of the north wall. None bore stamps, and most were pieces of semicircular *tegulae* with black glaze, though fragments of the shallower valley-tiles also appeared. It is highly probable that in addition it had painted terracotta ornamentation, for some of the fragments of this material which came to light close to the building may well have belonged to it, though others may equally well be debris from the Chalkioikos Sanctuary higher up the hillside, for the latter may be assumed to have had similar ornament, at least in early archaic times. I must content myself with reproducing here a selection of typical fragments of a disc-acroterion, found scattered

¹ *B.S.A.* xxvi. pp. 297 ff.

at various points between the two buildings, which by its scale would seem to belong rather to the new-found structure. They are apparently, but not absolutely beyond doubt, from one acroterion. The front surface has a firm and rather lustrous black glaze, on which the white paint is laid (the so-called 'black-couched' technique),¹ whereas the red is laid straight on the clay. The pieces illustrated (Fig. 2) have the following decoration, commencing from the centre of fragments *a + b*, which seem



FIG. 2.—FRAGMENTS OF PAINTED TERRACOTTA DISC-ACROTERION. (Scale 1:4.)

to join: semicircular vent-hole; large *torus* and two smaller *tori*; cymation with leaf-pattern, alternate leaves being red and black, with white edges, separated by incised lines; 'coursed masonry' or 'step'-pattern, with incised guide-lines, in eight courses, with colours arranged diagonally thus: white, red, black, white, black, red; recessed fascia, black with saw-tooth in white; *torus* (originally three in all?) coloured brownish-black. On *c* we have: black fascia; two black *tori*; fascia red with white zigzags; recessed fascia black with inverted saw-tooth in creamy white; above, uncertain. On *d*, which is from the outer edge, we have:

¹ Cf. E. Douglas Van Buren, *Greek Fictile Revetments*, p. 181.

concave black zone; double guilloche in red, white and black, framed in pairs of incised lines; scale-pattern similarly framed above, the scales coloured (diagonally upwards from l. to r.) white, black, red, white, black; *torus* with white chevrons to r.; leaf-pattern, coloured, from l. to r., red, white, red, black, red, white, etc., with a thin white stripe over the incised vertical divisions; the dentellated projections above are broken off short.

The general resemblance of this acroterion, as far as preserved, to the well-known large example from the Heraion at Olympia¹ is so striking that a common place of origin will alone explain it; and the similarities in minor details warrant us in regarding them as closely contemporary. That Sparta was the home of this type of acroterion, and of the other elements of architectural decoration usually found associated with it, seems now established beyond doubt.² The numerous pieces found at the Orthia Sanctuary, of which it is hoped the publication will not be long delayed, afford even stronger confirmation of this view, which cannot be fully discussed here.

Remains of burnt deposit within the building, at the level of the top of the foundations, both east and west of the disturbance caused by the drains, shewed that its final destruction was due to fire; for, though bone-fragments occurred in this level, they were not numerous, nor so carbonised as to suggest that they were debris from burnt-offerings. Beneath this burnt layer was plenty of pottery exhibiting no stratification, and covering a long period, from Geometric down to fourth century or even later, and we can only conclude that before its destruction the building had been long in use. At no point in the building where accurate observation was possible was a layer of exclusively Geometric deposit recognised, but at a few points, especially close to the line of the east wall, there seemed to have been a shallow layer of undisturbed accumulation of the Orientalising period, lying right on the virgin clay, and nowhere more than 12-15 centimetres in depth. The rest of the finds from the interior can only be described as mixed filling, in which Hellenistic sherds were plentiful, and Geometric more numerous than Orientalising. The majority of the finds which we may more confidently associate with the building came from outside the

¹ *Olympia*, ii. p. 190 f., and *Tafelband*, ii. Pl. CXV.

² E. Douglas Van Buren, *op. cit.*, pp. 18 and 60 f.; cf. *B.S.A.* xxvii. p. 201.

north wall, and it seems that the debris was thrown out in this direction, and not, as might have been expected, down the hill, for beyond the probable line of the south wall and outside the east and west walls alike, the deposit grew quickly shallower, and at only about a metre from the conjectural position of the south-east corner came to an end altogether.

Apart from this conclusion, the actual find-spots of the objects discovered shed no light on the history of the building, and we must content ourselves with the suggestion that it can hardly date back before the seventh century and may have continued in use till the fifth or fourth. Its purpose is much more clear, however, for by its position and its architecture it could scarcely have been anything but a Sanctuary, and the exclusively votive character of the objects found in and above it leaves us in no doubt. To this evidence I will return below.

For its identification we have no evidence beyond that of the finds, and among them several inscribed objects, not exclusively sherds, which were found in its immediate vicinity may be definitely ascribed to this building, in distinction to the debris thrown down the hill in the later filling. As they prove to bear no dedication to any deity but Athena, we must accept the conclusion that it was a subsidiary shrine of that Goddess, later in origin and less famous in associations than the Brazen House situated higher up the slope of the Acropolis.

(b) *The Finds.*

There is no need to deal here with the objects found in and adjacent to the newly-discovered Sanctuary and elsewhere on the site, as they will form the subject of special articles where they deserve them. The pottery of native origin and the bronzes are fully dealt with by Professor Droop and Miss Lamb respectively, in sections 4 and 5 below. The other pottery of imported fabrics, mostly Attic, the pithos-fragments, inscribed sherds, archaic terracottas and architectural terracottas are not yet ready for publication. There are also a few pieces of archaic sculpture in Parian marble, and certain architectural fragments in the same material, which deserve publication when opportunity offers.

The lead figurines, which were surprisingly few in comparison with the large numbers found at the Orthia Sanctuary and the Menelaion, may be omitted, as they seem to add nothing to our existing knowledge of the types. Of the other metal objects the most important were the

iron, largely consisting of iron spits, but unfortunately much broken, which no doubt represented the early Spartan currency. These turned up at all points in the area excavated, and I hope to deal briefly with them elsewhere. The single example of a carved ivory plaque of archaic date from the Acropolis, which came to light some distance to the east of the main votive deposit, is described below; the only object of the same material carved in the round, an ivory gryphon-head, has been published already (*B.S.A.* xxvi. p. 275). The inscriptions, other than those on votive sherds, have been published already, with one important exception, namely, the incomplete metrical dedication to Athena, found in the clay layer slightly to the south of the retaining-wall of the *cavea*, above the presumed south-east corner of the small sanctuary. This, as was pointed out in the Annual Report for 1926-27 (cf. *J.H.S.* 1927, p. 242), is inscribed *boustrophedon* on three sides of a stele (the fourth is lost), and contains the scanty remains of upwards of twenty lines of a hymn which cannot date from later than the last quarter of the sixth century, and might be even earlier. I hope to give an account of it in the next volume of the *Annual*.

A few notes on the distribution of the finds seem desirable to complete my present report. Whilst on the whole the pottery was distributed all over the deposit, it was observed that the most prolific section in finds of Geometric ware was that opposite the centre of the Chalkioikos-wall, where the deposit had been tapped, but far from exhausted, by Mr. Dickins's trial trench in 1907;¹ and that the majority of the finer decorated pieces of Laconian III and IV ware came from a small area just north of the small sanctuary, east of where the drains had destroyed the north wall.

The bronze statuettes came mostly from the western half of the deposit, on the slope well above the small sanctuary; none came from inside it, or even close to it; but three important exceptions must be noticed: the bearded Satyr (No. 5 in Miss Lamb's paper) was found about midway down the *cavea*, in a pit dug to find one of the stairways in 1925, having no doubt been washed or thrown down the slope from the votive debris above, before the Theatre was built. The fine archaic naked woman (No. 6, *ibid.*) was found in the upper layer of red clay, just north of the *cavea*-wall, and slightly below the base of its rubble

¹ *B.S.A.* xiii. p. 144 f.

foundations, close to the point where it is intersected on the Plan (Pl. V) by the section-line A-B. The larger Athena (No. 8, *ibid.*) was discovered in 1925 high up in this clay filling, also just north of the *cavea*-wall, about opposite the centre of the Portico. From various spots in this clay also came several fine Orientalising pins, and the relief with a boar from the cheek-piece of a helmet (Fig. 6, *ibid.*).

Of the sculptured fragments, the find-spot of the 'Leonidas' has been already described (*B.S.A.* xxvi. p. 250), and it is noteworthy that practically all the other pieces came from the small area between this point and the small Sanctuary. Close to its north wall, just west of the drain, was part of the left arm, also in Parian marble and slightly over life-size, of a male figure, to be ascribed almost certainly to the 'Leonidas'; and slightly further west we found several small fragments which must have belonged to an archaic Athena of barely two-thirds life-size, including drapery, part of a foot, a finger and a snake's head, with open mouth coloured red, from her aegis. Among relief-fragments from the same area may be mentioned two, each of which has part of an Athena-head in archaic style, one perhaps from a shield of unusually thick section, and from within the building came two small pieces of a frieze of lions attacking bulls, on which plentiful traces of colour (red and blue) had survived. The few recognisable architectural marbles, including two antefixes, parts of a small cornice with *cyma recta*, and of an architrave with triple fascia, also in Parian marble, came from within, or just outside the west wall of the building, but do not justify us in ascribing them to it, as their scale seems too small. They may have belonged to some altogether different structure which we cannot locate.

The distribution of the other finds was so sporadic that no importance can be attached to it.

(c) *The Rest of the Acropolis.*

In the eastern portion of the site we uncovered, and when necessary removed after measuring, the Roman house-walls shewn on the Plan, which formed a western extension of the system brought to light in our first two campaigns. They are of similar construction, in tough rubble-concrete, but otherwise devoid of interest, for they were associated with no finds worthy of record. The evidence of coins indicates that the

houses can hardly be earlier than the third century of our era, and were still occupied in the fourth.

Still further eastwards we made extensive trials in 1926 with a view to testing the possible presence of votive deposit indicating some other sanctuary, and the conjectured existence of a central entrance to the *cavea* direct from the Acropolis, but in each case our results were disappointing. The whole area examined proved to be much disturbed, as there was a complex of Roman houses extending past the axial line of the *cavea*, and in places projecting down the slope into it, and some apparently mediaeval foundations added to the confusion. Moreover, there was no definite votive deposit, and the only early-looking foundations, consisting of a short length of *poros* blocks resting on undisturbed soil, told us nothing as to the plan or purpose of the building to which they had belonged. The only archaic find at a deep level was a fragment of an ivory relief of a man leading a horse, which resembles some of the rather coarser examples from the Orthia site.

For a central entrance to the *cavea* our results were hardly more successful, owing to destruction and rebuilding. Just west of where the entrance was expected to lie was a small domestic bath, plaster-lined, with various marbles built into its rubble walls, including a fragment of a good Ionic capital. In pulling them out we found, also built in, a *sestertius* of Gordian III, which gives a valuable clue to the date of the bath, and probably of some of the house-walls adjacent. Other miscellaneous marbles found close at hand included a small Doric monolithic column of late type, nearly complete, a voussoir-block from an archway, and several much-broken fragments of an architrave. More interesting, but tantalisingly incomplete, were numerous fragments, deliberately broken up, of a Latin inscription in monumental lettering which seemed to belong either to a massive base or possibly an epistyle. Too much is lacking to permit a restoration (and perhaps more than one inscription is represented) but enough is preserved to shew that it was in two lines, and included apparently the name of the Emperor Tiberius, the word *Augusti* repeated three times, the titles *Pontif. Max. Trib. Potest.* in line 1, and —*t Concordia Cae[sarum(?)]* on another unplaced fragment.¹ We can only say that though we found nothing in the shape

¹ These fragments require still further study, but will not, I fear, yield enough results to permit of a full restoration of their contents.

of foundations to prove the existence of our supposed entrance, there remains the possibility that these had been entirely removed and that the architectural fragments and even the inscription might have formed part of such a structure.

Other inscriptions found adjacent include the archaic dedication to Athena already published (*B.S.A.* xxvii. p. 250, No. 38), and several fragments of a decree, which I hope to publish in the next volume of the *Annual*, passed, probably in the late third or early second century, by Eretria in favour of a board of Spartan *dikastai*.¹

We also examined the foundations of the west wall of the large ruined building whose north wall is preserved above ground. Though this has hitherto been taken as mediaeval, we found that the style of construction of these foundations is curiously like that of the walls of the rooms behind the *Scenae Frons* at the Theatre, an important point of similarity being the system of setting pieces of tile symmetrically round some of the stones in the rubble concrete,² and there seems good reason to believe that the foundations of this wall at least—and perhaps the whole structure—date from late Roman times. I have no suggestions to make for its purpose, and a fuller excavation did not promise to prove remunerative.

Still further eastwards, apart from picking up again the *cavea*-wall some thirty metres east of the axial line, we found nothing deserving record. At the extreme east end of the Acropolis ridge is the interesting Byzantine church excavated by Mr. Cuttle in 1925-26, which merits, and I hope will receive, a separate report when occasion offers. We may note here that, contrary to our expectations, it did not occupy the site of a sanctuary of classical times. Beneath its floor, and near the east end of the south side only, we found a few Hellenistic sherds of domestic types, and at a higher level extensive traces of a settlement of the Imperial age which yielded terracotta figurines and votive limbs, and a few moulds for their manufacture—apparently indicating a factory and shop for the supply of votive offerings in terracotta to those about to visit the shrines on the Acropolis. West of the church is the apsidal end of another, apparently smaller, church which we did not excavate. In the area between this and the *cavea*-wall is an open space in which we dug various trial-pits in 1927, but found only Byzantine foundations in a much-

¹ Cf. *B.S.A.* xxvi. p. 236.

² *B.S.A.* xxvii. p. 198.

collapsed condition, resting in some places on the virgin clay. Seeing that the fuller investigation of this region would be certainly dangerous and in all probability, as far as Hellenic remains are concerned, unprofitable, I did not persevere further with it. Having regard also to the uniformly negative results of trials made in 1908-9 west and north of the Chalkioikos Sanctuary, we may now claim that our exploration of the main ridge of the Acropolis has been completed effectively. When the finds from the area containing the votive deposit have all been adequately published, the full importance of the excavation will be duly appreciated.

A. M. WOODWARD.

EXCAVATIONS AT SPARTA.

(PLATES VI, VII.)

§ 4.—THE NATIVE POTTERY FROM THE ACROPOLIS

AT the Director's invitation I was at Sparta for the two months' campaign of 1927, and had the opportunity of studying the pottery found on the Acropolis hill in the four seasons of 1924-27, a deposit that doubtless consisted of offerings to the shrine of Athena Chalkioikos.

The fact that the deposit was not a natural growth but an imported filling (*B.S.A.* xxvi. p. 252) precluded any observable stratification. Thus there was no hope of obtaining a check on the views as to the development and dating of the Sparta pottery that were based twenty years ago on the stratification found at the shrine of Artemis Orthia. The most that could be hoped for was further light on the details of the style at the various periods.

Part of this deposit was excavated by the late Mr. Guy Dickins when he dug the Chalkioikos shrine in 1907 and 1908, and it is perhaps a matter for congratulation that he did not at that time strike the main mass of this material; for its chaotic state would probably have induced an element of bewilderment which might, although it should not, have affected the appreciation of the more orderly products of the temple of Orthia.

One thing does emerge from the study of this pottery, namely, that we must modify our view as to the two periods ¹ in which the sanctuary flourished; for there was enough pottery of the seventh and early sixth centuries to shew that the continuity was unbroken from early Geometric down to late Hellenistic times.

The last two years' work produced less Hellenistic ware, so that it is not possible to add anything with profit to Miss M. B. Hobling's adequate

¹ *B.S.A.* xiii. p. 139.

study of that pottery.¹ Time, moreover, did not permit me to make a detailed study of the few Attic sherds. The present paper will therefore be confined to the Geometric and Laconian periods.

THE GEOMETRIC PERIOD

Slip and No Slip.

The Geometric sherds, some 3000 in number, shew slipped and slipless ware in equal proportions, a result somewhat disconcerting at first sight when we recall that the pottery found on the Acropolis by Mr. Dickins shewed a proportion of 80 per cent. without slip. It appears, however, that the deposits, though they cannot be said to be stratified, had yet a certain geographical distribution—the offerings of different periods seem to have been tipped out in different directions, and thus to have been kept more or less together when used as filling; for instance, the bulk of the Hellenistic ware was in the area dug in 1925. It is then not necessary to modify the view that the ware without slip is the earlier, for the facts can be accounted for if we assume that the pottery dug in 1907 was mainly an early lot. Roughly the pottery dug in 1907 was about half of the total amount of Geometric ware from the Acropolis hill, so that the proportions work out at about 35 per cent. of slipped ware to 65 per cent. of slipless.

It is not necessary to assume that all the ware without slip is earlier, yet we can still believe that the preponderance of slipped sherds at the shrine of Orthia indicates a later beginning of the cult at that spot. We must, however, abandon the idea ² 'that towards the end of the Geometric period offerings on the Acropolis dwindled,' as the deficiency there of slipped sherds has now been made good.

Patterns.

A study of the simple patterns in which the style indulges confirms in the main the conclusions drawn on the earlier evidence.

Concentric circles (*B.S.A.* xiii. p. 120, Fig. 1 *n*, *o*) are found on 20 per cent. of the sherds without slip but only on 2.1 per cent. of the slipped ware. Hatchings (*loc. cit.*, *k*) appear on 8.4 per cent. of the slipless sherds but only on 2.5 per cent. of the slipped; stars, a

¹ *B.S.A.* xxvi. p. 277 ff.

² *B.S.A.* xiii. p. 123.

rare motif, appear on 1 per cent. of the slipless but only on 0.1 per cent. of the slipped sherds.

On the other hand, chequers (*loc. cit.*, *w*) are on 5.2 per cent. of the slipped and only on 0.4 per cent. of the slipless; blotchy lines (*loc. cit.*, *i*, *k*), a distinctively Laconian feature, are seen on 4.9 per cent. of the slipped ware but only on 1.4 of the slipless, and chevrons, another very rare pattern, are found on 1 per cent. of the slipped but only on 0.06 per cent. of the slipless ware. The remaining patterns are more or less evenly distributed between the slipped and the slipless sherds.

Straight lines, horizontal and vertical, greatly preponderate; there is hardly a sherd without them, and 53.7 per cent. of the slipped and 44.2 per cent. of the slipless shew no other design.

Next in frequency come zigzags (7.3 per cent. in both kinds) and lozenges (7.3 per cent. slipped and 2.1 per cent. slipless), dots (5.2 per cent. slipped and 2.1 per cent. slipless), meanders (3.7 per cent. slipped and 3.9 per cent. slipless), short, wavy, perpendicular lines and (*loc. cit.*, *s*) thick, short, wavy, perpendicular lines (both 2 per cent. slipped and 0.6 per cent. slipless), and hatched triangles (*loc. cit.*, *l*), 1.2 per cent. slipped and 2.7 per cent. slipless.

It would seem then that there is ample confirmation for the view that concentric circles and cross-hatching were patterns in favour when the slipless ware was chiefly in vogue, and that these together with stars shewed a tendency to drop out in favour of blotchy lines, chequers and dots when the use of slip came into fashion.

Even if there were not the evidence supplied by the great preponderance of slipped ware at the Orthia site, which must represent a temporal not a geographical difference, the two sites being so close to one another, these changes of pattern would in themselves be warrant enough for supposing a broad difference in date between slipped and slipless, since the patterns are equally suited to either surface. It is, however, the continuity of the stratified deposits at the shrine of Orthia that shews us which is the earlier of the two.

There is nothing to add to the illustration of typical Laconian Geometric sherds published in 1908 (*B.S.A.* xiii. p. 120, Fig. 1), but in Fig. 1 a few unusual sherds have been assembled. *h* shews a piece of slipped ware with a swastika of many arms, a design more frequent in Boeotia than anywhere else; *m* in black paint without slip has a wheel-like



FIG. 1.—LACONIAN POTTERY. *a*, SUB-GEOMETRIC. *c-o*, GEOMETRIC.
UNUSUAL DESIGNS. (Scale 1 : 2.)

motif that might be part of a vehicle in a figure scene; *i* shews one of the rare stars here combined with concentric circles on a sherd without slip and with strongly metallic glaze; while *n* is a meander unusually elaborate for Laconia. *e* and *f* have horses, that on *e* being held by a groom; while *c*, *d* and *g* shew men, the last seated and perhaps pouring a libation on an altar. There is a certain interest in the juxtaposition of these five pieces, for they exemplify three different techniques, the primitive silhouette (*c*, *d*, *e*), the reserved technique (*f*) affected mainly by the Ionian styles, and the incised style (*g*) supposed to be derived from the bronze work of Corinth and typical of her pottery before it became common form for the black-figured style.

In view of this sherd *g* it appeared desirable to examine again the sherd with the fish published in 1908 (*B.S.A.* xiii. p. 124, Fig. 3 A). I am now convinced that in that case incision was an afterthought to supplement reservation where this had been forgotten. Some of the lines were definitely scratched but others left bare. This might, of course, supply us, if we needed it, with an alternative origin for the incised technique. In the sherd *g* found this year, however, there is no doubt of incision having been intended throughout. As for the reserved technique we may look on the Spartan fondness for this, which lasted almost to the close of the seventh century, as yet another mark of the reaction of the Lacedaemonians to the influence of Ionian art.

The sherd shewn at *b* is very peculiar. Neither designs nor fabric are properly Laconian. There is no slip, the clay is pinkish-buff smoothed to a buff surface, and the paint is brown thinning to light red. The fabric, in fact, is more like that of a good L.H. III. sherd than of any Geometric ware known to me.

A lid handle in the form of the usual Geometric bird should be mentioned.

There is a small proportion of sherds which shew decoration in white paint on a black ground. Sometimes the white appears in the form of a line or a zigzag on a broad black band on a vase, the decoration of which is otherwise normal, but more often the white ornamented vases that were otherwise completely black. Straight lines and zigzag lines (*l*, Fig. 1) are the most usual pattern, dots are perhaps less frequent and concentric circles uncommon. One white meander of simple form is

unique, and so are the waved upright lines (*k*), and the pear-shaped figure surrounded by dots (*o*), both of which are on jug lips.

There is no evidence to shew whether the addition of white was a late development or not, for the black ware on which it is most often seen was present in good quantities at all periods; but it is noteworthy that the use of white on black is found on some of the architectural terracottas which can hardly be earlier than the seventh century. One completely black vase is illustrated in Fig. 2. This vase, a larger and stumpier version of the Proto-Corinthian aryballos, is the only clear-cut piece of evidence as to shapes afforded by the Acropolis deposit, and it has not



FIG. 2.—LACONIAN GEOMETRIC ARYBALLOS. (Scale 1 : 2.)

been possible to substitute anything more certain in place of the sketch published twenty years ago of more or less probable-looking combinations formed by joining actual lips, necks and bases (*B.S.A.* xiii. p. 122, Fig. 2).

Metallic Glaze.

No reason was found in the new excavations to modify the statement that the 'most striking' examples 'of the metallic gleam of the black paint are confined to the ware without slip, especially to that with the clay hard and red where the paint is often applied particularly coarsely,' the Amyklaion style, in fact. But the statistics shew that the metallic sheen to a greater or less extent is to be found in the slipped ware even more frequently than in the slipless, the figures being, in fact, 18·4 as

against 13.6 per cent. This metallic gleam is apt to reappear later in Laconian IV. It was the result of hard firing; for of two sherds which joined, one of which had obviously been burnt and the other not, the paint on the burnt piece only was metallic.

SUB-GEOMETRIC WARE

Sub-Geometric ware may be defined as pottery with in general Geometric technique (white slip and black-brown or reddish-brown or metallic black paint), and designs generally Geometric in nature, but differentiated by the addition of some element akin to the Orientalising style, whether Oriental beast (*e.g.* lion) or floral (*e.g.* rosettes and rays) or other curved pattern (*e.g.* hooks), and rarely of purple paint.

At the site of Orthia sherds of this kind came chiefly from the mixed layer that contained Laconian I, Proto-Corinthian and slipped Geometric ware. They are therefore among the first pieces to shew Oriental influence. They are with rare exceptions sherds of larger vases than the general run of Laconian I vases. There is no doubt that they are a development contemporary with Laconian I, and it is reasonable to conclude that the Laconian potter prudently confined his more daring experiments in the new Laconian style to small vases, while for his larger ware he departed less violently from the old Geometric tradition. The same thing doubtless happened elsewhere, and we may take it that the makers of the earliest Proto-Corinthian pottery when they made large vases made Geometric or Sub-Geometric ware.

The Acropolis deposit produced further examples of this pottery, some of which are illustrated in Fig. 1 *a*, Fig. 3 and Fig. 4.

These sherds speak for themselves, and the differences between them and the typical Geometric sherds shewn in *B.S.A.* xiii. p. 120, Fig. 1, need no emphasis. The dots on Fig. 3 *e* and *j* are in added white. Fig. 3 *q* has a lion in the reserved technique with purple (indicated by the cross-hatching) on his shoulder; *f* probably shews a bird (cf. *B.S.A.* xii. p. 40, Fig. 17 *a* and *b*, for a bird with similar outline from Crete), while on the inner side of *d* is an object in relief painted black that may possibly be part of a bird in flight, later a frequent painted motif in Laconian III. The sherd at *h* is very typical of this class with its pattern of squares, but unfortunately the pattern was entirely destroyed on the area hatched in the illustration.



FIG. 3.—LACONIAN SUB-GEOMETRIC SHERDS. (Scale 1 : 2.)

The sherd shewn in Fig. 4 doubtless belongs to this class, and shews perhaps the earliest Spartan sphinx. It is at any rate difficult to account for the curved lines to the left except as part of a wing, though this is not satisfactory, since the wing of the Spartan sphinx always curves back towards the head, as do all other archaic wings. Yet the head-dress suggests the sphinx, as it looks like the prototype of the head-dress that the Spartans were fond of giving to sphinxes and sirens. Another, and perhaps better view, though it leaves the curved lines frankly without explanation, is that we have here a portrait of Paris in a Phrygian cap.



FIG 4.—LACONIAN SUB-GEOMETRIC SHERD. (Scale 1 : 1.)

LACONIAN I

Nothing has been added to the broad lines of our knowledge of the 'Lacanian' pottery, the pottery peculiar to Laconia from the beginning of the Orientalising period down to the third century,¹ the details of which were published in *B.S.A.* xiv. pp. 30 ff.

All six periods were present in the Acropolis deposit, the first and the last two being most fully represented, which was only to be expected, for these periods were, according to the evidence from the temple of Orthia, comparatively long, whereas changes happened quickly during

¹ Reasons are given below for supposing that Laconian VI lasted longer than was thought twenty years ago.

the development of the style in the second and third periods and in the initial stages of decay in the fourth, and those periods were therefore relatively short. If we make allowance for this, the dedicated vases would appear to have been fairly evenly distributed through the years.

The pyxis shewn in Plate VI is so far out of the ordinary that when it came to light some doubt was felt whether it might not be an importation, though no suggestion was hazarded as to its origin. Last year when shewn the drawing I was inclined to think such doubts ill-founded, because I remembered three bits of a pot from the sanctuary of Orthia of undoubted Laconian fabric, which possessed two of the peculiarities of this pyxis, viz. heads drawn in outline and absence of slip, at any rate on one side (*B.S.A.* xv. p. 25, Fig. 3, *fff*). Moreover, the ribbing, or beading, below the figures and on the bottom is exactly that on the rim of the typical plate of Laconian I. And when I saw the sherds themselves this year, the clay and the paint combined to banish all doubt from my mind as to their Laconian origin.

To assign the vase its exact place in the Laconian series is more difficult. It is true that the vase that it called to mind is certainly Laconian II (*B.S.A.* xv. p. 26), and that the pattern of reversed z's is most often found in that period (*e.g.* *B.S.A.* xv. p. 153, Fig. 16 *r*). Yet the general appearance, the extreme elongation of the horses' backs, to which a fair parallel at Sparta is to be seen in the lion (?) of a Sub-Geometric vase from the Menelaion (*B.S.A.* xv. p. 151, Fig. 15 *a*), and the pyxis form, a favourite shape of the later Sparta Geometric but not a 'Laconian' shape, all these point to an earlier date round about the beginning of the seventh century.

The division of the ware of this time into Sub-Geometric and Laconian I, though it fits nearly all the pottery, will not fit this vase, for it shares in the characteristics of both classes, and, in fact, thus provides complete proof of their side by side existence.

The vases of Laconian I are small, have purple paint and often black ribbing and eschew the patterns of the Geometric periods and the use of figures. When figures with outlined heads begin to be put on small vases with purple paint the style is changing to Laconian II. Outlined heads at the beginning of the century are on larger vases usually with some form of Geometric ornament, and without purple paint. These are classed as Sub-Geometric (*B.S.A.* xiii. p. 126).

This pyxis is a medium-sized vase, and in its shape, with holes for suspension, and outlined figures, and absence of purple might be called Sub-Geometric if the absence of all Geometric ornament, except the reversed z's, a Sub-Geometric pattern (Fig. 3 *r*), which survived to flourish in Laconian II, did not make that classification sound absurd. The ribbing is strongly Laconian I, and I have therefore put the description of the vase into this section, though it is rather large, has no purple and is ornamented with figures.

All that can be said of the absence of slip, which is normal only in the earlier Geometric and in Laconian V and VI, is that it is peculiar but is occasionally found like a sport in the eighth and seventh centuries.

Similar doubt as to classification, though not as to period, affects several pieces of definite Laconian imitations of 'bird bowls' which may be mentioned here.

The bulk of the sherds of Laconian I consists of fragments of the regular plates with ribbed edges (*B.S.A.* xiv. p. 32, Fig. 2 *a, b, f*), skyphoi (*B.S.A.* xiv. p. 31, Fig. 1 and Fig. 2 *g, i* and *k*), lakainai with straight short sides (*B.S.A.* xiv. Fig. 2 *d*, and xv. p. 23, Fig. 1 *a* and *b*), one of which has horizontal ribbing like that of the plate rims on its black belly, and bowls, which later grew a stem to become the kylix (*B.S.A.* xiv. Fig. 2 *c, h*, and xv. p. 23, Fig. 1 *e*).

To the base of a vase of one of these latter shapes (their bases are indistinguishable) belongs the sherd illustrated in Fig. 5 *f*. The inner side is covered with the normal black glaze, but the under side, instead of the usual cross pattern (*B.S.A.* xiv. Fig. 2 *d*) or circles (*ibid.*, *c* and *g*), has an eye painted in white on a ground of black, which ground is further ornamented with a series of short grooves, incised before the application of the black, radiating from the eye. Probably it was prophylactic, and it is perhaps significant that this, the bottom of the cup, is the favourite position of the Gorgoneion, which makes its first appearance in the second Laconian period. A very good example from the Acropolis is shewn in Fig. 5 at *j* (see below, p. 66). Examples from the shrine of Orthia are to be seen in *B.S.A.* xiv. p. 33, Fig. 3 *b*, and Fig. 4 *t* and *u*, and xv. p. 32, Fig. 8 *u*.

An unusual vase, which from the nature of the glaze and slip must belong to Laconian I, is shewn in Fig 6 *a*. Rim and shoulder and a line round the base are black, while the belly has a broad band of slip. The

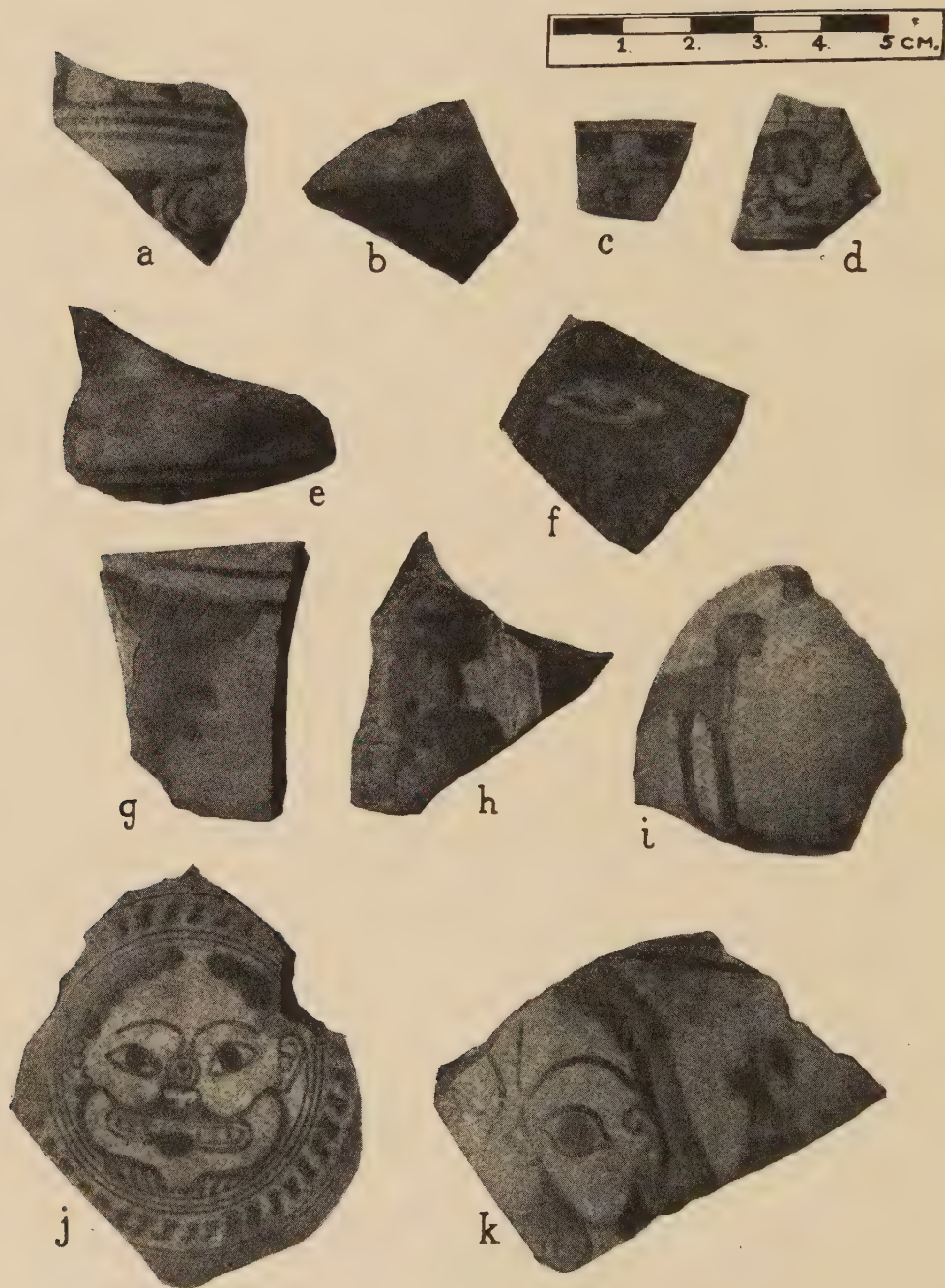


FIG. 5.—LACONIAN I, *f*; LACONIAN II, *a–e, i, j*; LACONIAN III, *h, k*; LACONIAN IV, *g*.

handle (it is uncertain whether or no there were two) is black except for the lower part above the junction with the shoulder where the bare clay



FIG. 6.—LACONIAN I, *a, b*; LACONIAN II, *c, d*; LACONIAN IV, *e*.

is allowed to shew. Possibly the vase should be classed as Sub-Geometric, but there is no doubt as to its period.

Several miniature bowls without handles were also found like those published in *B.S.A.* xv. p. 23, Fig. 1 *c* and *d*.

Black-ground Vases.

Side by side with the normal white slipped ware there was a fair proportion, perhaps 20 per cent., of the small vases (chiefly globular aryballoi but with some examples of bowls and straight-sided lakainai) shewing ornament of white and purple lines applied to a black ground, no doubt a development from the white on black Geometric vases. These vases were first mentioned in *B.S.A.* xiii. p. 128 under the heading of 'Style A.' The evidence from the temple of Orthia was that they were most frequent at the beginning of the Laconian style but continued steadily down to the end of the sixth century. One or two globular aryballoi have the whole lower hemisphere painted white on the clay, and two remarkable aryballoi were found, one with straight sides and conical neck, the other with a fluted cylindrical body.

Fig. 6 *b* shews another unusual form with two horizontal handles and the decoration, a purple band edged with white, confined to the shoulder. These black-ground vases are of course the prototypes of the miniature pots (*B.S.A.* xiii. pp. 129 and 172), without a fair sprinkling of which the Acropolis deposit could not have been thought properly representative.

LACONIAN II

The Laconian II sherds shew the wealth of patterns which the Orthia and Menelaion deposits taught us to associate with this time when the style was rapidly developing and essaying new designs, many of which were quickly dropped by the severer taste of the next period.

As for shapes, so far as can be judged from the Acropolis sherds, the favourite is the lakaina, which now begins to oust the skyphos. Both shapes now outspiral the lip. Plates are less common than in the earlier period, the bowl with a stem, the kylix, makes its appearance with a stem that is short and thick usually slipped and painted with black and purple rings (*B.S.A.* xiv. p. 45, Fig. 10), round the top, and often with tongues on the sharp-edged foot, and there is the first appearance of the trefoil-lipped jug which has not been found in Laconian I. What this means is that the style has now found its feet and is being applied to larger vases. The trefoil-lipped jug was a Geometric form, and there can be little doubt that some of the lips from the mixed layer at the Orthia site belonged to the period of manufacture of Laconian I.

The plates of Laconian II abandon the black-painted ribbing in favour of a pattern of short rays and tongues, but an occasional piece is found that retains the ribs and applies them to the outside as well as to the top of the rim, which is thicker and less projecting than the normal type, being square in section. On these plates black is eschewed in favour of slip inside and out, with purple, the fresh red variety, on the outside of the rim and in a band well below it.



FIG. 7.—LACONIAN II. PLATE RIM. (Scale 1 : 2.)

One unusual plate rim was found, convex instead of flat, with ribbing, two channels, by the outer edge. These and the edge itself were coloured purple. The rest of the top surface and the under surface were slipped, and the top surface had a pattern of chequers. Quite two-thirds of the rim of this plate was found (Fig. 7), but not a piece that could be supposed to be part of the body, which was very disappointing, as so fine a rim might be supposed to have had quite an elaborately decorated centre. The usual bolster handle is absent, its place being taken by a pair of suspension holes.

A typical skyphos of the period is seen in Fig. 6 *c*, the lip being no longer a straight line but an outward leaning curve. The square and dot lip pattern, which is regular throughout the seventh century, is still retained, but the shoulder, always black in Laconian I, is now diversified with the fully developed pomegranate, new in Laconian II, but a great favourite in the next period. The rays rising from the base are thinner and more elongated. A comparison of this vase with the typical Laconian I skyphos published in *B.S.A.* xiv. p. 31 brings out clearly the development both in form and decoration.



FIG. 8.—LACONIAN II. ARYBALLOS. (Scale 1 : 1.)

The new narrow rays are also seen on a cup with a sharply offset lip (Fig. 6 *d*). It is possible that there was a second ring handle such as we see on the Laconian IV bowl at *e* in the same figure.

Another vase of form similar to *d* but more elongated, and therefore nearly pear-shaped, has a row of tongues, alternating purple and black, below the offset rim (missing), and lower, above the rays from the base, a band of rudimentary pomegranates. The tongue pattern, common property to Greek vases after the Geometric period, appears as we have seen (Fig. 3) on Sub-Geometric ware, but not on the contemporary small vases of Laconian I.

The small aryballos (Fig. 8) in the form of a helmeted head may be

put here, though it is not easy to date it definitely by technique.¹ Early, very early, Laconian III is the latest period to which it could belong, yet it might even be Laconian I. On the whole the excellence of the slip used for the face and the purple of the eyelashes point to the later seventh century.

Fig. 9 is a restored drawing of a two-handled cup which with its



FIG. 9.—LACONIAN II. CUP. (Scale 2 : 3.)

curved outplayed profile and its ornament of water birds in silhouette, vertical bands of z's and narrow rays, is typical of its time. I am inclined to think the vase was probably slightly taller with rather longer rays than the drawing shews it.

Though the lakaina sherds illustrated in Fig. 10 are unusual, for the stag is a rare beast on Laconian pottery and *füllornamente* are in general foreign to the style, there is no doubt either of the provenance or of the

¹ Cf. Maximova, *Vases Plastiques*, I., p. 153 ff. *Corpus Vasorum Antiquorum*, Pays Bas, Fasc. I, IID and IIIC, Pl. I. 4.

period of the vase. The clay and slip shew it to be Laconian, though accident (?) has discoloured both slip and glaze to a curious redness, while the combination of beasts in procession in both techniques with the square and dot rim ornament place it in Laconian II.

Other examples of beasts in procession in the reserved technique are seen in Fig. 5 *a-e*. The Menelaion (*B.S.A.* xv. p. 153, Fig. 16 *f*) produced a parallel example in this period of reserved and incised techniques on the same vase. There is just enough preserved of the bulge of the belly to make it certain that the vase in Fig. 10 was a lakaina. The large cross no doubt filled the space above the handle. The splash of white paint on the haunch of one stag is remarkable, since the use of white



FIG 10.—LACONIAN II. LAKAINA. (Scale 2 : 3.)

for details did not become the rule till Laconian V, when the darker background following on the disuse of slip gave such white points a value that they could not have had against the white background of the slip.

In view of this the presence of this splash of white gives rise to the idea that possibly the reddish glaze and reddish-buff slip may not have been accidental but intentional, an experiment that was not followed up but remained, so far as we know, unique. The absence of any purple either in bands or on the beasts lends force to the idea. Such an experiment in the colour scheme of decoration is perhaps not inconceivable at a time when there was so much experiment in designs.

Two typical Gorgon heads of this period are shewn in Fig. 11. That at *a*, reproduced also from a photograph in Fig. 5 *j*, is from the bottom of a cup, and is remarkable for the fresh red of the purple used for the tongue

and for dots on the hair, which is neatly parted in the middle, giving her an old-maidish aspect. The other is a relief applied to the side of a small vase. A parallel is to be seen in *B.S.A.* xv. p. 25, Fig. 3 *d*.

The piece of an aryballos of Fig. 5 *i* has a sphinx treated in plain silhouette, a hark-back to the work of Geometric days. The drawing is very careless, but I think the correct classification is Laconian II.



FIG. II.—LACONIAN II. GORGON HEADS. (Scale 1 : 1.)

LACONIAN III

In Laconian III on the Acropolis the lakaina keeps the popularity that it had in Laconian II. Plates are more popular again but do not reach the level of favour attained by the lakaina, while the oinochoe and kylix are third and fourth. There are a few pieces of bowls and cups, but the skyphos has disappeared.

To this period belong three fragments of bowls, the slipped bellies of which are moulded with vertical grooves presenting the appearance of a cantaloup melon. One from the fresh red of its purple and the undeveloped form of the pomegranate ornament probably should be put to Laconian II.

A certain number of the moulded heads attached to handles (*B.S.A.*

xv. p. 27, Fig. 4) were found, most of which are to be assigned here. The usual head is that of a lion. There was one dog excellent in its moulding, but from the poor black glaze not to be placed earlier than Laconian IV. Of human heads, only one, a woman's, was found (Fig. 20 *b*; probably, being painted black, to be assigned to Laconian IV or V),

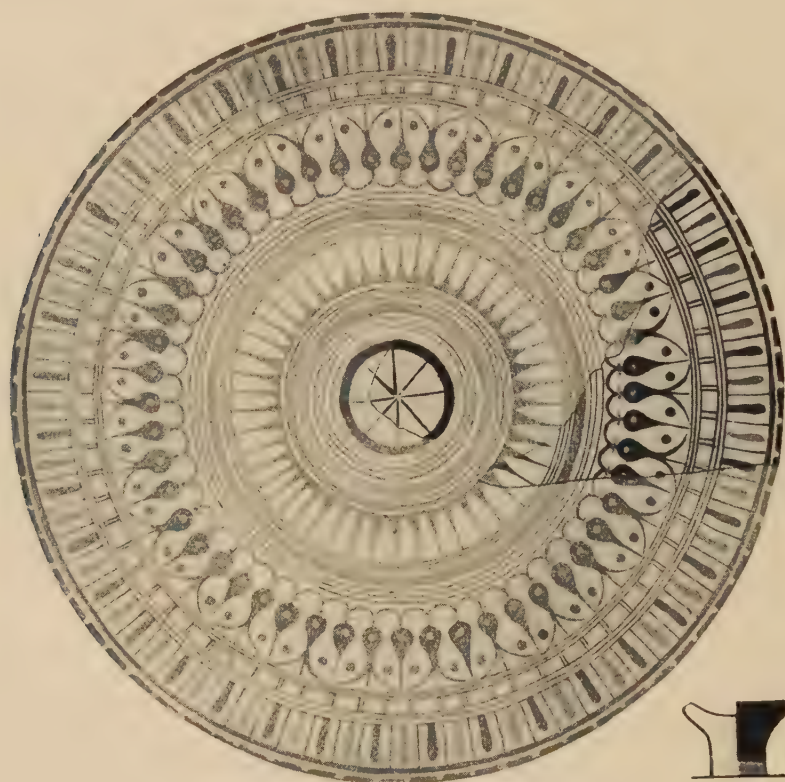


FIG. 12a.—LACONIAN III. LID. (Scale *ca.* 2 : 5.)

and a curious fact is the almost total absence in this deposit of the moulded palmette known to be frequent below the oinochoe handle of this period. It was present, however, as a surviving trace shews, on the jug shewn in Plate VII, which with its complete coating of slip and the purple spots on the pomegranates on the neck is a characteristic product of the early part of Laconian III. The bird's neck as a space-filler between the pair of rather fantastic fowls is noteworthy.

There is no doubt that these ornaments in relief, first found in the Sub-Geometric class (*B.S.A.* xiii, p. 126, Fig. 6 *c*), were imitations of metal vases. The drawings seen at Fig. 12 *a* and *b* are restorations, of which the



FIG 12*b*.—LACONIAN III. KYLIX. (Scale 2 : 5.)

justification must be that they give a better idea than the mere sherd of the effect of the third Laconian style. That shewn at *a* is a combination of two pieces of lid, part of the rim and the knob to lift it by. There is, of course, no proof that the two pieces are from the same lid, but a lid is so unusual at this date that the probability is that they are. The proof

that the edge piece is part of a lid is that it is perfectly flat and that the under side is without slip or paint. The knob, which is black outside and hollowed on the top, with radiating lines on its slipped surface, speaks for itself. The sherd at *b* is part of a large kylix ornamented with one of the most decorative designs in the whole range, now fairly considerable, of Laconian pottery. No part, I think, of the actual rim survives. The under side is shewn in Fig. 13 *c*, with a cock and part of a sphinx.

Luckily the sherd shews just enough to make the restoration a practical certainty, the actual centre only being unknown.

It is probably right to call the three pieces of Fig. 13, *a*, *b* and *d*, Laconian III. But the very elaborate and careful lotus on the oinochoe neck at *a*, and still more the white and purple design on the black of the neck, a pattern that is in the very spirit of Laconian II, make it impossible to put the sherd later than the very earliest years of the sixth century. The painted inscription is then but little later than those of the plates from the shrine of Orthia (*B.S.A.* xxiv. p. 105, Fig. 1, 28, 30).

The sherd at *b* shews a tantalising glimpse of the monstrous figures in which the Spartan potter sometimes delighted, as we know from two vases from the temple of Orthia (*B.S.A.* xiv. Plate III, xv. Plate III). Presumably the purple dashes are intended to indicate a furry covering to these winged creatures in human form, while the trees (?) may be meant for palms. *d* has part of a 'Komos' to which Laconian pottery has other parallels.

All three sherds have plain undecorated insides. The sherd illustrated in Fig. 5 *h* comes from a cylindrical portion of a vase of fair size. It is decorated with the head of a sphinx or siren facing right. The unusual feature, however, is, projecting in front of the sphinx, a vertical ridge which, with the space beyond it, is painted black. One can only suppose that this is another imitation of metal-work, the vertical ridge marking off a panel above the handle, but the form of the vase remains obscure.

The Gorgon head of Fig. 5 *k* affords a good contrast with that of Laconian II next to it. Incision is now used for the pupils of the eyes and the curls of the hair. Purple bluer than that of the Laconian II sherd is now only used for a band above the hair possibly representing a wrap. The small female to the right shews incisions but no purple, and the



FIG. 13.—LACONIAN III, *a*—*d*; LACONIAN V, *e*, *e'*. (Scale 1 : 2.)

general impression left by the sherd is of incipient degeneration suggesting a date towards the middle of the sixth century.

Three or four sherds shew a new base pattern, crescents arranged in a wheel.

This is the first appearance of the crescent, which is often used as a frieze in the late fourth and fifth periods.

LACONIAN IV

The change to Laconian IV is gradual, the criterion being deterioration of fabric rather than alteration of style. Slip becomes poor and begins to be partially omitted, possibly for that very reason. Poor slip and paint and partial absence of slip, with a general carelessness, are, in fact, the marks of the period. Oinochoai, lakainai, kylikes and plates appear to have shared the popular favour.

Only two pieces seemed worthy of illustration. Of the first (Fig. 5 *g*), the photograph cannot adequately convey the poor quality of the glaze, purple paint and slip. It is part of the belly of an oinochoe shewing a female head wearing a purple head-dress like a cushion, giving an odd suggestion of a caryatid.

The other (Fig. 6 *e*) is a two-handled cup. Here the degeneracy of drawing is marked, and the cup is probably near to the borderland of Laconian V, though slip is omitted only in the line just below the lip. A fair parallel is presented by the bowl fragment illustrated in 1908 (*B.S.A.* xiv. p. 41, Fig. 7 *d*).

LACONIAN V

The remarkable point about the ware of this period from the Acropolis is the predominance of small two-handled cups or bowls. This was continued through Laconian VI into the Hellenistic period. It must always be remembered that what we are dealing with is a mass of dedicated vases, and there are indications that the fashion in dedications obeyed impulses of its own and did not always represent the whole extent of manufacture. Unless this is borne in mind the presence of the Kantharos on the well-known Spartan grave stelae, and on the vases (Fig. 13 *d*) is an inexplicable puzzle, for no vase of that shape has ever been found at

Sparta. We can only conclude that this bacchanalian form was not thought suitable for dedication to a maiden goddess.

At any rate from the beginning of the fifth century small cups seem to have formed the bulk of the dedications, mostly with one reserved belt bearing a single leaf pattern without bough, the rest of the body being painted black.

There is evidence that dedications of oinochoai and lakainai fell off very considerably, but that the kylix continued to be in favour. All the pieces of kylix stem shew the rounded edge to the foot and the ridges round the upper part, that are characteristic of the period (*B.S.A.* xiv. p. 43), taking the place of the earlier painted rings.

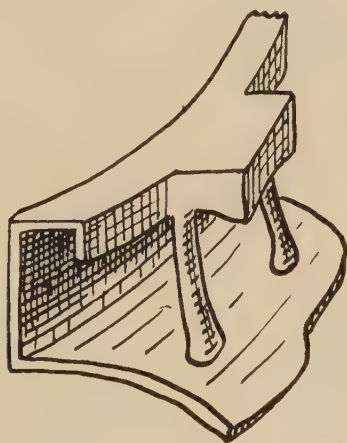


FIG. 14.—LACONIAN V PITHOS. (Scale *ca.* 1 : 5.)

Fig. 13 *e* shews part of a small simple kylix which is perfectly typical of this time, so that there is no doubt about the restoration of the shape; but whether the fragment seen in Fig. 20 *a* with the figure of a man dancing is part of a cup or a small kylix cannot be decided.

A remarkable fragment was part of the lip and handle of a pithos. The appearance of the clay and the surface of the excellent, smooth exterior, which was bare without decoration, suggests that it is most correctly placed here, though the poor, washy, red-black paint of the inside might lead us to think it later. The noteworthy point is the handle, which appears to have had two upright slender pillars round in section supporting an extension of the flat rim, which is edged by a hanging cornice (Fig. 14).

LACONIAN VI

The Acropolis deposit does not shed very much light on the nature and limits of Laconian VI. Its effect is rather that of moonlight on the road confusing all outlines. In the sherds published in 1908 and 1909 (*B.S.A.* xiv. p. 44, xv. p. 37) it is easy to trace Laconian patterns in degenerate form. In those collected in Fig. 15, though they are obviously the same ware, this does not seem so easy. It was, in fact, when studying the mass of sherds of this period, mainly fourth century, not very easy to determine on its own merits whether any particular sherd was or was not Laconian, for the style has lost its clear outlines. Time was too short to allow me to study again the Orthia sherds of this class, but I suspect myself of having unwittingly put into those photographs an undue proportion of sherds with Laconian patterns in order to make clear the continuity.

On the Acropolis at any rate the debased scrolls form the larger proportion of the patterns. A small number of red-figured sherds were in the deposit, some of which, like the two figured, were certainly Laconian. Others were probably Attic. But for those black-figured sherds of which fabric and style can best be described as indefinite it is hard to suggest any source from which they should have been imported in the last half of the fifth century, and it is probably best to look on them as local, not imitations, but adumbrations of Attic glaze and designs.

It is not easy to fix a bottom date for the Laconian series. Nothing in the deposit on the Acropolis hill suggests that there was any breach of continuity in the dedications, and it would seem that the Laconian series gave way gradually and imperceptibly to the pottery that is definitely Hellenistic, among which on the Acropolis are many pieces of bowls of exactly the type of those dedicated to Orthia by Chilonis (*B.S.A.* xxiv. p. 111, Fig. 2). These it would seem must be dated to the third century. Now since Miss Hobling's careful study of the Megarian bowl fragments from Sparta we cannot place any of these many years before the middle of the second century. Thus it would seem that the third century and not the late fourth century is the earliest date that can be postulated for the stratum at the sanctuary of Orthia that was immediately above the Laconian VI pottery, for it was the presence of Megarian bowls, then inadequately known, that suggested a fourth-century date for that



FIG. 15.—LACONIAN VI VASE FRAGMENTS.

stratum. We should then perhaps suppose that this last Laconian period lingered on into the third century.

UNUSUAL VASES

It is during the course of this last Laconian period that the vases, Laconian in manufacture though not in style, must have been made, the sherds of which are reproduced in Figs. 16, 17 and 18. That of Fig. 16

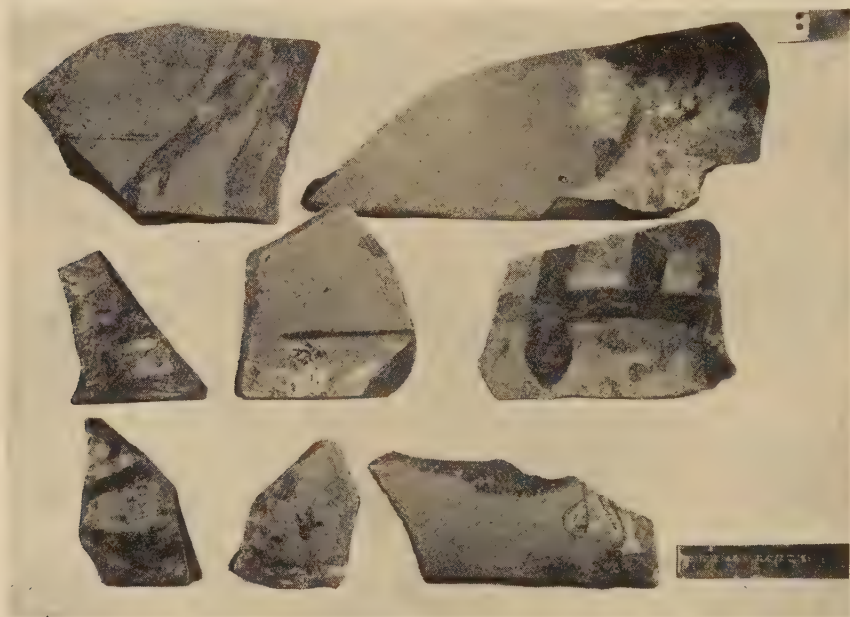


FIG. 16.—LACONIAN SHERDS DECORATED WITH WHITE ON BLACK ON A GROUND OF THE NATURAL CLAY. 4th cent. B.C.?

has a good smooth surface almost of Laconian V quality. The inner side is painted with a bad fugitive black glaze, so that the vase must have been wide-mouthed. The bearded head, obviously not earlier than the mid-fifth century, has the flesh done in thick white, while hair, beard and eye are in washy black. The piece to the left has a man's body passably well drawn in white over black. Both pieces shew a facility of draughtsmanship quite strange in Laconia, but a carelessness of execution that fits well with what we know of Spartan pottery at this time.

It is not certain that the sherds in this photograph are all from the same vase, but they are in the same technique.

Similar care-free facility is to be seen in the two sherds of Fig. 17 which have the decoration in white on a ground of black, a form of ornament essentially of the fourth century.

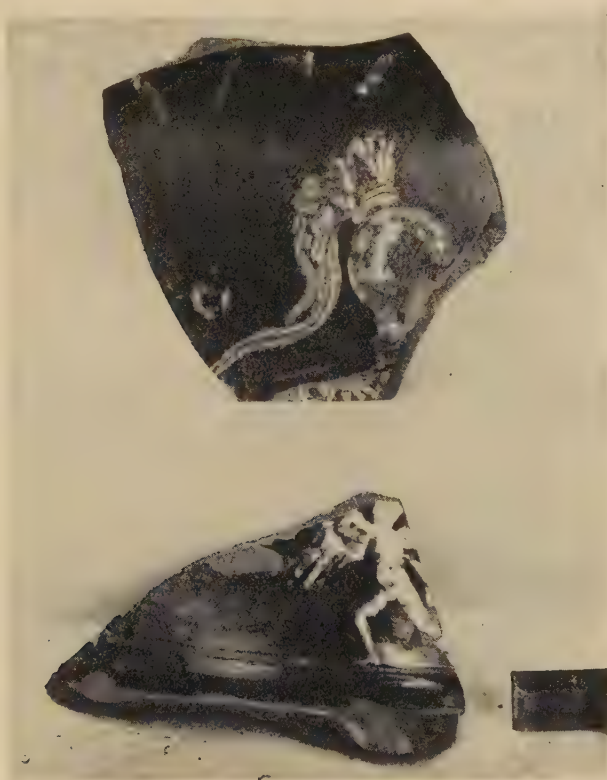


Fig. 17.—LACONIAN SHERDS DECORATED WITH WHITE ON BLACK. 4th cent. B.C.?

The third vase is interesting as a definite local imitation of the Athena of a latish Panathenaic vase. It was not, however, an amphora, for there is a thin wash of black on the inside. But an attempt has been made to achieve the effect of the Attic red by covering the surface of the local clay with a thin pinkish wash to intensify the colour. A Panathenaic original is the more likely, since at this date there would hardly be other B.F. models.

Last must be mentioned the ware of which a selection is shewn in Fig. 19. It is a coarse ware generally a pinkish-buff in colour, but sometimes a pale grey, with a surface occasionally gritty and an ornament consisting solely of small impressed circles.

I have no note of such sherds at the sanctuary of Orthia or at the Menelaion, though it is possible, where so much was new and of greater artistic interest, that some were turned up but were overlooked.

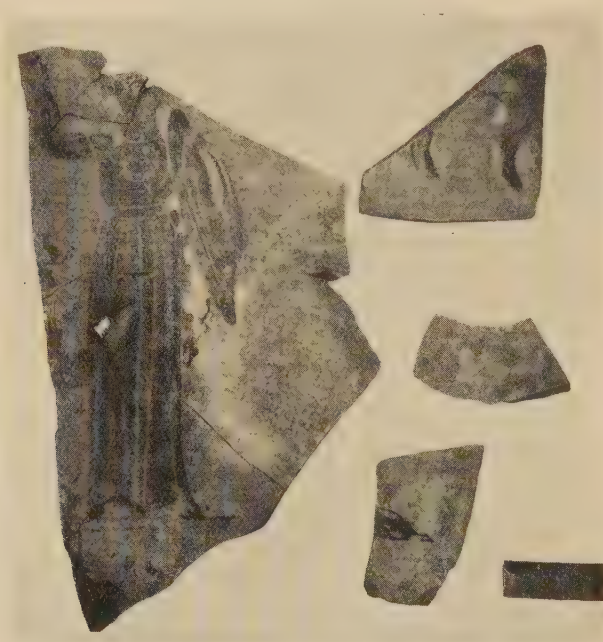


FIG. 18.—LACONIAN COPY OF PANATHENAIC AMPHORA.

It is clear that the ware cannot be dated by its associations on the Acropolis, where all stratification was disturbed. But in 1928 Mr. Woodward, in a small supplementary excavation at the shrine of Orthia, found ware of a similar fabric, though lacking the impressed circles, associated with undisturbed Geometric deposit both above and below the cobble-pavement of the Geometric period. The early date is thus established, and the relatively large quantity found is a good indication of local origin in spite of the difference of clay, which tends to be gritty. How long this coarse ware continued side by side with the decorated Laconian ware has not yet been established. Its associations on the

Acropolis suggest, indeed, a long period of use, but these cannot, of course, be trusted.

INTRUDERS

A final paragraph may note the presence of some sherds that may be considered foreign to the Laconian fabric.

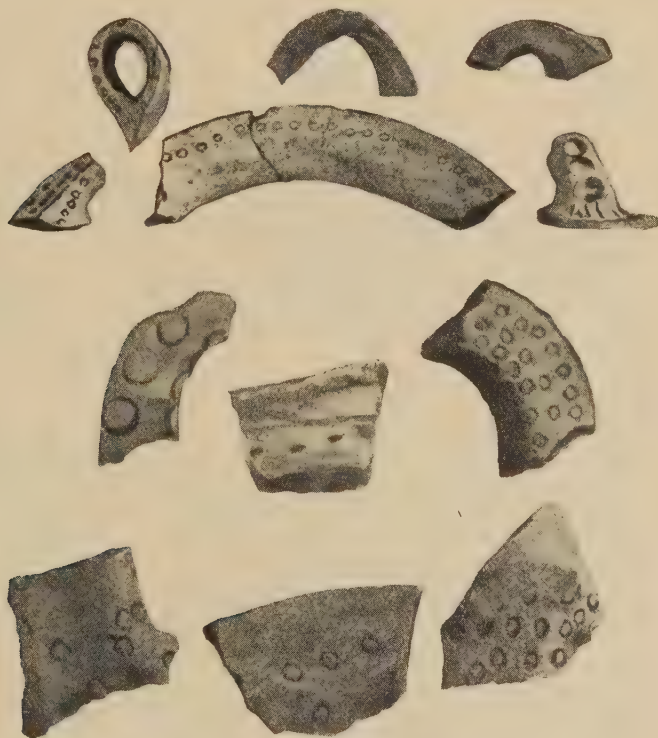


FIG. 19.—LACONIAN EARLY UNPAINTED WARE.

(Scale, upper two rows *ca.* 2 : 5. Lower two rows *ca.* 1 : 2.)

Mycenaean.

In the first place there were about twenty-five small sherds that appeared to be Mycenaean, a latish L.H. III, though they were too small to classify. They included two kylix stems. The fabric was hard baked, the slip buff and the glaze red, but for the most part dull. The designs were too fragmentary to be typical.

Proto-Corinthian.

Of 'Proto-Corinthian' ware little was found, on the whole a smaller

proportion than that yielded by the site of Orthia. Some pieces shewed the fine lines in reddish paint characteristic of that found at Sparta (*B.S.A.* xiii. p. 127). These were representatives of the pyxis, skyphos, and conical lekythos.



FIG. 20.—LACONIAN V, *a, b*; PROTO-CORINTHIAN, *c-e*. (Scale 1 : 1.)

With brown to black paint the pieces were mainly of aryballoi, globular or pear-shaped. These have to me the appearance of being slightly more developed and later, or the difference might be geographical, though no distinction is observable in the very pale buff clay. Both

types of paint suffer apparently from insufficient baking and are often found to have disappeared.

The greater number of pieces are of no particular note. One pear-shaped aryballos has two friezes of running beasts painted in silhouette. Another, round, has parts of incised horses and snakes. There is one bit of a 'bird bowl' in Proto-Corinthian clay, and there is a small portion apparently of a clay box, or perhaps of a throne for a seated terracotta figure, decorated with a purple guilloche between black chevrons painted with minute excellence. The sides are bevelled, cut at an obtuse angle, and shew a row of dots.

More extraordinary is a piece of a vase moulded to the form possibly of a Gorgon head (Fig. 20 *e*). At any rate the lower part appears to be a forehead, and what look like snakes black with incised scales are wound round the top of the head (?). Below them and above the 'forehead' is a band of meander incised in black. The puzzling point is that when the fragment is stood vertically according to the wall of the vase, as seen on the inside, the curve of the lower portion below the snakes does not agree with any preconceived notion of the curve of a forehead. The edge of the vase, perhaps representing a kind of *polos* above the snakes, has a form of incised palmette. Almost all the paint has disappeared and there was no trace of purple.¹ Nor was there any purple on the small globular aryballos shewn in Fig. 20 *c* with an upper ornament of horizontal S spirals and radiating lines, and below, an exquisite drawing in outline, to judge by the head, which is just visible to the right.

To be mentioned also is an oinochoe with downward pointing rays on the shoulder, which might have been classed with Laconian Sub-Geometric but for the fact that the clay was not Laconian, but of the pale buff variety that one associates with the Argolid or with Proto-Corinthian ware. The paint too was very fugitive, like that of most of the Proto-Corinthian sherds found at Sparta.

Finally should be mentioned the few sherds of Panathenaic amphorae and other Attic vases contained in the deposit, which must be held over for future study.

J. P. DROOP.

¹ A kind of parallel from Corinth is in the Antiquarium at Berlin, No. 1338; cf. Maximova, *op. cit.*, ii., Pl. XXXIX, No. 143. I owe this note to Mr. Woodward.

EXCAVATIONS AT SPARTA, 1927.

(PLATES VIII—X.)

§ 5.—BRONZES FROM THE ACROPOLIS, 1924—1927.

OF the bronzes found during the recent excavations, one, the naked woman, No. 6, is an important contribution to the history of Spartan art, while many of the others present points of special interest. Two statuettes, Nos. 4 and 6, are almost certainly local work; two others, Nos. 1 and 9, are probably so. The *protomai*, Nos. 24–28, have every claim to be Spartan products; so too have many of the minor objects. Two figures appear to be imported from the North-East Peloponnese, Nos. 2 and 3. In the following account, a complete description is given of the more important unpublished bronzes, and a short supplementary description is included of some of the bronzes published in Vol. XXVI of this *Annual*.¹ A number of small and apparently insignificant finds are also mentioned, since it is desirable to have a complete record of the bronzes associated with a given site.

All were discovered in the area south of the wall of the Chalkioikos precinct: the stratification of the area has already been described and explained.²

Human Figures.

(1) *Primitive figure.* Ht. .06 m. (Pl. VIII). Found in 1925 on the Acropolis.

This figure is naked except for a belt. It belongs to the Geometric period, but is not of the conventional Geometric type. The horizontal position of the arms is comparatively uncommon: the hands, flat, like fins, are distinctive.³ There is a resemblance, perhaps superficial, to bronzes from North-Western Greece.

The importance of the statuette lies, however, in the fact that it

¹ *B.S.A.* xxvi. pp. 247–8, 266 ff.

² *Ibid.*, pp. 240–52.

³ Compare, however, the terracotta figure *Olympia*, iv. No. 283, Pl. XVII.

is the only human figure of the Geometric period from Sparta save one. This one is a seated man from the Orthia site,¹ of a type that has hitherto been considered Thessalian: it may, therefore, have been imported, whereas our bronze was probably made locally.

(2) *Male figure bending, once the handle of a vase.* Ht. .093 m. or .105 m. if the curve is taken into account. Found in 1925 on the Acropolis (Pl. IX).

This figure once stood with its feet on the shoulder of a jug or hydria, and its hands raised to touch the rim: there would have been a palmette below the feet, a ram at either side of the feet, and a lion on the edge of the vase at either side of the head. During the sixth century, handles of this type were not uncommon: ² the best examples are on the hydria from Randazzo in Berlin ³ and the jug from Sala Consilina in the Dutuit Collection.⁴ Vases decorated in this way were at first attributed to Chalcis ⁵ and more recently to South Italy.⁶ The evidence is inconclusive, but is against the theory of a Chalcidian origin. Since more than one style is represented among the hydriae and jugs, I am inclined to think that more than one district produced them, and that some come from South Italy, others from the North-East Peloponnese: Etruscan copies also exist.

There is not enough of our Spartan handle to enable us to decide which other handles it resembles, but the rendering of the muscles points to an early date, somewhere in the middle of the sixth century.

(3) *Youth with knees bent*, in what used to be called the running position. Ht. .067 m. (Pl. IX).

This position was used for bronzes which decorated some object: the youth may have come from a tripod and been placed at the top of one of the three legs, for, in most sixth-century tripods, the bowl was carried, not by the legs but by the curved supports between them.⁷ There are no marks on the head or back of the statuette, but a bit of bronze is attached to the left heel, through which a nail could be passed.

¹ See p. 99.

² See the lists in *Röm. Mitt.* 1924, p. 344, and Fölzer, *Die Hydria*, p. 70. Add the pair of handles in *Burlington Fine Arts Catalogue* 1903, Pl. LXV, Nos. 92, 93.

³ Berlin, 8467. *Führer durch das Antiquarium*, I, p. 68. Fölzer, *op. cit.* p. 69.

⁴ *Röm. Mitt.* 1924, Pl. VIII, p. 343.

⁵ Fölzer, *op. cit.* p. 68. For other references, see *Röm. Mitt.* 1924, pp. 393 ff.

⁶ Berlin, *Führer durch das Antiquarium*, p. 63. *Röm. Mitt.* 1924, p. 415.

⁷ *Jahrbuch*, 1921, p. 106.

The hair is elaborate. A fringe is brushed back from the forehead, in the fashion common in Attica and the Peloponnese in the middle of the sixth century. Compare the Kouros from Longa ¹ and the youths on Laconian kylikes. Two ribbons bind it at the back, as on the crouching ivory figure from the Orthia site.² Enough of the features remains to shew their likeness to those on a half-life-sized bronze head in Athens that Langlotz has attributed to Corinth.³

This statuette must belong to the middle or third quarter of the sixth century.



FIG. I.—BRONZE AT CAMBRIDGE. (Scale 3 : 4.)

(4) *Youth with hands behind him.* Ht. .07 m. (Pl. VIII).

The base is not pierced with nail holes. A heavy incrustation hides the details of the figure and obscures the features. We can see, however, that the eyes were disproportionately large and that the hair was worn in some sort of a roll at the nape of the neck. A rope (?) passes round the right wrist and hangs down behind : at its lower end is something

¹ *Δελτιον*, 1916, p. 102, Fig. 52.

² *B.S.A.* xiii. p. 94, Fig. 27b.

³ Athens, 6590. Langlotz, *Frühgriechische Bildhauerschulen*, p. 81, Pl. 43b. Compare also Athens Inventory 26 from Dodona.

thick. I do not think that the hands were bound,¹ but that the man is represented dragging some weight, hence the forward stoop of the body.²

A bronze figure at Athens, also from Sparta, presents the same problem (Pl. VIII).³ Both hands hold what looks like a rope: the twisted end of it is seen in the right hand. A third figure from Sparta, now at Cambridge⁴ (Fig. 1), resembles the last two in having the right hand well behind the back, but the broken left arm reaches forward, and the stride is shorter.

The date of all these bronzes is the last quarter of the sixth century.

(5) *Small Satyr*. Ht. .045 m.

He appears to be dancing and scolding, with knees bent and hands raised,⁵ but the position may be due to the figure having been part of some object. Satyrs of this type decorated utensils of various kinds.

(6) *Naked Female Figure*. Ht. .087 m.⁶ (Pl. VIIIx).

She stands with her right arm extended, and the hand clenched: the left hand is held up palm outwards, and on neither hand are there marks of attachment. Both, therefore, were empty. The modelling is good, particularly on the back, but the eyes are very prominent. Round the head is a diadem, in front of each ear is a little curl. The eyebrows are rendered by incised lines; the fringe of hair round forehead and neck is marked with small notches; so, too, are the curls. The diadem is engraved with small vertical lines.

This bronze belongs to an important series of sixth-century figures.⁷ All represent naked women: nearly all served as mirror supports, play musical instruments, and wear curls in front of the ears. Their style is one which Langlotz has shewn to be Spartan; the subject is less alien to Sparta than to the rest of Greece; and the provenance of at least two of the examples hitherto published is Laconia. To these, a much incrustated bronze from the Orthia site should be added: a larger edition

¹ As in the small twisted figures from Arcadia, recently acquired by the National Museum, Athens (15130), whose feet are bound as well as their hands.

² Mr. Woodward's suggestion of Kleobis (or Biton) is the only one that explains the subject. The story may have been at home in other parts of the Peloponnese besides Argos.

³ No. 12312, ht. .10 m.

⁴ Inv. 28.10, ht. .10 m. including tang.

⁵ Contrast the Satyr from Amyclae. Athens, 7544. Staïs, *Catalogue*, p. 309.

⁶ *J.H.S.* 1927, p. 242, Fig. 2.

⁷ *Jahreshefte*, 1912, pp. 219 ff.; 1915, pp. 57 ff. Langlotz, *op. cit.* pp. 86, 87.

of the same subject is perhaps represented by an arm holding castanets, found during the earlier excavations of the Chalkioikos site.

Amongst all these examples, those which most nearly resemble our little lady are the figures from Cyprus in New York ¹ and the mirror support from Nemea in Vienna.² Their faces, like hers, are plump, their eyes rather prominent, but they are more slenderly built. They were mirror supports, she was not; for, though a bit of the diadem is corroded, there is no mark of attachment on the head. Herein she resembles the figures in the Trau Collection ³ and the Louvre.⁴

These bronzes have hitherto been explained as attendants on Artemis Orthia.⁵ Here is one presumably from the shrine of Athena, but this need not distress us. A pretty bronze figure would be appropriate at any sanctuary.

One point remains to be explained: the position of the hands. Neither could have held any instrument, but the gesture is that of a conductor with a choir. Is it fanciful to suggest that, to the many figures of musicians, a conductor was sometimes added? Or that our bronze is the leader of a choir, as was Hagesichora in Alkman's *Partheneion*?

The Athena Promachos, No. 7, the late fifth-century Athena, No. 8, and the Nike, No. 9, have already made their *début* and will therefore be described more briefly.

(7) *Athena Promachos*.⁶ Ht. .093 m. (Pl. VIII).

She wears a high helmet, from beneath which her hair seems to fall in a straight mass cut square at the base. There is a gorgoneion on her breast, but no trace of an aegis; her chiton is marked with formal incised lines. Her right hand originally held a spear, her left a shield. The base was clamped down into its mount by a nail which passed through a hole at either end; beneath the base, a small bit of iron still adheres.

This bronze appears to belong to the early years of the fifth century, and there is no reason why it should not have been made locally.

¹ Richter, *Catalogue*, No. 28. Langlotz, *op. cit.* Pl. 46.

² *Jahreshefte*, 1912, pp. 219 ff. Langlotz, *op. cit.* p. 86, No. 13.

³ *Jahreshefte*, 1912, p. 235, Fig. 153. Langlotz, *op. cit.* Pl. 45b.

⁴ *Jahreshefte*, 1912, p. 235. Langlotz, *op. cit.* p. 87, No. 20.

⁵ Langlotz, p. 91.

⁶ *Preliminary Report*, 1924, p. 13, Fig. 9.

(8) *Athena*. Ht. .14 m.¹ (Pl. IX and Fig. 2).

Her right hand is raised: probably she held a spear and leant her weight upon it. On the left arm, we can still see the strap which held the shield in place. The costume consists of a Doric peplos with the apoxygma falling far enough to cover the girdle. The hair appears to have been twisted round a fillet to keep the ends in place; a roll of it is allowed to shew beneath the raised cheek pieces of the helmet, while another roll falls on the nape of the neck. On the helmet is an inscription. ΑΘΑΝΑ Α (*Ἀθανα[ί]α[ι]*). The left foot is bent; beneath the right is a nail for mounting.

This bronze is Peloponnesian work of the middle of the fifth century:



FIG. 2.—HEAD OF ATHENA WITH INSCRIPTION.

the inscription is not inconsistent with such a date. The arrangement of the heavy drapery and the bent head are motives common in contemporary Peloponnesian bronzes: their most perfect embodiment is, perhaps, the Spinning Girl in Berlin.²

The possibility that the Spartan Athena was influenced, though not directly, by the helmeted Athena from one of the Olympia metopes³ must also be taken into account.

(9) *Nike*. Ht. .071 m. (Pl. IX).

To the account given in *B.S.A.* xxvi. p. 269, I would only add that a number of small, inferior figures with proportions like the Nike were made in the central Peloponnese during the fifth century, probably also in Laconia. This supports the date suggested in the original publication.

¹ *Anzeiger*, 1926, p. 423. ² Berlin 30082. Wiegand, 73tes *Winckelmannsprogramm*.

³ The Augean stable Metope. *Olympia*, iii. Pl. XLV. 12.

Decorative Statuettes.

(10) *Leg of some object, ornamented with siren.* Ht. .144 m. (Fig. 3).

The siren is unusual, for she is composed of head, wings and paws: bird-body and claws are lacking. At the period when this bronze was made, the type of facing siren was not yet stabilised, a fact which may account for the clumsy juxtaposition of the parts. For the paws I know of no parallel.



FIG. 3.—BRONZE SIREN. (Scale *ca.* 4 : 7.)

The head is flat on the top; the hair is marked by wavy lines running downwards. Behind the head is an upright bar with two holes in it; another pair of holes can be seen in the knees. Through all four holes ran nails for attachment to some object; a glance at the profile of the leg would shew that this object was fitted into the leg just below the knee. It was, no doubt, a box, probably square. Whether or not it was a toilet-box, like the Etruscan and Italian *cistae*, we cannot say.

The date must be somewhere in the first half of the sixth century.

The next bronze represents another, more conventional type of siren :—

(11) *Siren with lotus headdress on top of bronze rod.*¹ Ht. .12 m. (Pl. IX).

Though much corroded, this is one of the most interesting of the finds. The hair falls in thick locks on either side; from the head grows a lotus-bud. This lotus is common on the heads of sphinxes, but occurs also on the heads of sirens: cf. a bronze siren from Smyrna² (where the lotus has been broken), another in the British Museum,³ and a siren on a geometric amphora from Rhodes.⁴

The small siren on the fibula from the Orthia site (Pl. XI) should be compared with ours, though it is of a different shape: whether it also carried a lotus is uncertain.

Most details have disappeared, owing to the bad surface of the bronze.

The object shaped at the top like a calyx, on which the siren stands, is too large to be a pin; more probably it is the leg of a tripod.⁵ In this case, the siren would occupy the same position as the 'running' youth, No. 3.

Animal Statuettes.

(12) *Lion.* Ht. .035 m. (Fig. 5). Traces of engraving can be seen indicating the hair. This bronze was not part of a brooch as one would expect. The base is quite smooth and nothing was mounted on it.

Two more lions, of inferior style, were also found.

(13) *Bull.* Ht. .05 m., length .09 m. (Fig. 4). The style is poor. On the bull's body and neck are the conventional engraved lines which we see on so many of his kind. Along the back is an inscription ΑΘΑΝΑΙΑΣ. There are traces of stands below the back feet and front feet. Date: late sixth or early fifth century.

(14) *Bull.*⁶ Ht. .025 m., length .055 m. (Fig. 4). Head lowered:

¹ *Preliminary Report*, p. 13, and p. 11, Fig. 7 (top right).

² A Private Collection. Weicher, *Die Seelenvogel*, p. 102, Fig. 33.

³ *B.M.* 490.

⁴ Weicher, *op. cit.* p. 107, Fig. 38: see also p. 145, Fig. 70.

⁵ Mr. Woodward suggests it might be the handle of a lid.

⁶ *Preliminary Report*, Fig. 7 (lower row, right).

stands below front and hind feet, but no nail holes. Date: late sixth or fifth century.

(15) *Bull.* Ht. .032 m., length .06 m. (Fig. 4).¹ No nail holes in stand. Date as last.

(16) *Bull.* Ht. .04 m.² Date as last.



FIG. 4.—BRONZE ANIMALS. (Scale ca. 3 : 5.)

(17) *Ram.* Ht. .042 m., length .073 m. (Fig. 4). Stands with nail holes below front and back feet. Conventional marking of the fleece. Date, 550-470 B.C.

(18) *Ram.* Ht. .04 m., length .057 m. (Fig. 4). Indented markings on body to shew fleece. This bronze has been much trimmed after casting. No nail holes in base. Date, 550-470 B.C.

(19) *Frog.* Ht. .025 m. (Fig. 5). Compare the ivory and bronze

¹ *Preliminary Report*, Fig. 7 (lower row, middle).

² *Ibid.* (lower row, left).

frogs from the Orthia site,¹ and a terracotta frog from the Menelaion.¹ Evidently they were an appropriate dedication at all these shrines; they can be heard at or within a short distance of each.

(20) *Horse*. Ht. .043 m. (Fig. 4). This horse may belong to the fourth century or any later date.

(21) *Dove on Ring*. Ht. .05 m. (Fig. 4). Most of the ring has been destroyed by bronze disease. The plumage of the dove, neatly and formally marked, recalls that of the eagles from Mt. Lykaïos² and



FIG. 5.—BRONZE FROG AND LION. (Scale 3 : 4.)

Dodona,³ though it is not so fine. Another dove was found on the same site, but is not illustrated; it is .047 m. high and the ring is preserved; the plumage is, however, less well marked. A third dove is mounted on a stand; a fourth is perched on some object now lost.⁴ None of them can rival in charm the little owl found in the Chalkioikos site in 1907.

Votive Armour and Vase.

(22) *Miniature Breastplate*.⁵ Ht. .044 m. (Plate VIII.)

There are holes for the neck and arms, and a conventional indication of the chest and back muscles. At the base of the back is a nail hole. Breastplates of this shape, with the characteristic *flair*, are well

¹ For the ivory frog, see *B.S.A.* xiii. p. 101, Fig. 31. The bronze frog, Inv. 2163, is unpublished.

² *Εφ. Ἀρχ.* 1904, p. 195, Figs. 18, 19.

³ Carapanos, *Dodona*, Pl. XXI, Nos. 4 and 5. Athens, Inv. 69 and 70.

⁴ *B.S.A.* xxvi. p. 270, Fig. 5, No. 11.

⁵ *Preliminary Report*, p. 13 and Fig. 7 (second row).

known from sixth-century bronzes and vase paintings: the Spartan soldier Karmos,¹ a bronze statuette at Athens, wears one. The neatly incised retrograde inscription *'Αθαυαίαι* forbids us to date our example after *ca.* 500.

Compare the slightly larger votive breastplate from Praisos² where the muscles have turned into formal, half-decorative lines.

(23) *Vessel in form of miniature helmet.* Ht. .025 m. Cast (Pl. VIII).

There is a spout, but no base; the vase, therefore, is an imitation one, for votive purposes. Compare a miniature helmet, also with a spout but no base, from Kaiapha, now at Cambridge.³ This example is, however, covered with decoration, whereas the helmet from Sparta is plain. Among the bronzes from the Acropolis at Athens⁴ is a vase .058 m. high, in the likeness of a helmeted head. A small, bronze votive helmet, without any pretensions to being a vase, was found at Olympia, others at Bassae, Praisos and Delphi.⁵ The examples from Delphi are cast, but those from Olympia, Praisos and Bassae hammered.

Pottery vases in the shape of helmets occur among Proto-Corinthian vases, as well as among those of Ionian fabric. There are two good examples from the Orthia site, and one from the Acropolis is published above by Professor Droop (p. 64, Fig. 8).

Protomai.

These, five in number, are illustrated on Pl. X.

(24) Ht. .06 m., length .06 m.⁶ It is made in two pieces, the face, which has been hammered into a mould (such as the one found at Olympia⁷), and the back, which is a flat piece of bronze. None of the other *protomai* have this backing.

(25) Ht. .056 m., length .066 m.

(26) Ht. .06 m., length .056 m. Higher relief than last: surface corroded.

¹ Athens, 7598. Neugebauer, *Antike Bronzestatuetten*, Pl. 21.

² *A.J.A.* 1901, p. 384, Fig. 13, ht. .10 m. For other votive breastplates from Praisos, see *B.S.A.* viii. p. 258, Pl. X. For those from Bassae, see *'Εφ. Ἀρχ.* 1910, pp. 311, 312.

³ *J.H.S.* ii. p. 69.

⁴ De Ridder, *Catalogue*, No. 250, p. 86.

⁵ *Olympia*, iv. No. 1021. *'Εφ. Ἀρχ.* 1910, p. 314. *B.S.A.* viii. p. 258, Pl. X. *Fouilles de Delphes*, v. p. 107.

⁶ *B.S.A.* xxvi. p. 271, Fig. 5, 3.

⁷ *Olympia*, iv. Pl. VII. No. 88, p. 27.

(27) Ht. .033 m., length .04 m. There are two nail holes for attachment; the face has been crushed.

(28) Ht. .085 m., length .09 m. This too has been crushed. The *protome* itself stands out in higher relief from a triangular mount.

The finest type is that represented by Nos. 24 and 25 and by No. 30 from the Orthia site: No. 26 belongs to the same class, but is an inferior example. All these *protomai* have well-modelled features, hair arranged in the style called *Perlenfrisur*, and a close resemblance to certain terracotta *protomai*.¹ They appear to be earlier than the plainer, more stylised *protomai*, Nos. 27 and 28, and belong to the first part of the sixth century.

Though parallels for the terracottas occur elsewhere, the type is rare in bronze. The above-mentioned mould from Olympia proves, however, that examples were produced outside Sparta.

Reliefs.

The reliefs are, on the whole, very fragmentary. In addition to those already published,² one (No. 29, Fig. 6) deserves comment. It comes from the cheek-piece of a helmet (greatest length .136 m.). Round one edge are holes to enable it to be attached to a backing; on the field is a boar at bay.³

Among the less important fragments, many are decorated with multiple plaits,⁴ and one has small figures of animals, including a lion, in low relief. In size, but not in style, it resembles the reliefs called Argivo-Corinthian.

The objects hitherto described are the most important of the unpublished bronzes from the Acropolis. Of the rest, some belong to types already represented at Sparta, such as the pin-heads, the small double axes, and the miniature vases, which include a high-necked jug and phialae. There are also handles of various types (amongst them a mirror handle to which a palmette has been nailed), bits of twisted

¹ For the resemblance of No. 24 to *protomai* from the Menelaion, see *B.S.A.* xxvi, p. 271.

² See *B.S.A.* xxvi, pp. 266 ff.

³ Compare the boars engraved on certain Italian helmets in the British Museum, e.g. Nos. 2722, 2723.

⁴ Cf. *B.S.A.* xxvi, p. 270, Fig. 5, No. 13 (from the votive shield).

bronze from the hair of archaic statuettes (recalling certain bronze fragments from Olympia,¹ and elsewhere), the foot of a statue,² fragments of a full-sized phiale, and a bracelet. A miniature tripod, ornamented, apparently, with a head at the top of each support, awaits cleaning.



FIG. 6.—BRONZE CHEEK-PIECE. (Scale 4 : 5.)

The Acropolis has also produced a bronze poppy head,³ and what may be the seed vessel or calyx of a flower.⁴ Such objects are already known at Spartan shrines. Their shape varies : an ivory example from the Orthia site⁵ has some resemblance both to a poppy head and to an

¹ *Olympia*, iv. Pl. V, Nos. 22-29. *Fouilles de Delphes*, v. p. 42, Fig. 129. Waldstein, *Argive Heraeum*, ii. Pl. LXX, Nos. 1, 2.

² Length .093 m.

⁴ Ht. .066 m.

³ *B.S.A.* xxvi. p. 270, Fig. 5, No. 10.

⁵ *B.S.A.* xiii. p. 99, Fig. 30d.

immature quince; a bronze from the Orthia site is shaped like the calyx from the Acropolis¹; a terracotta from the Menelaion looks like a calyx with a flower inside.

We are familiar with quinces, pomegranates, and other fruits as symbols of fertility and attributes of most goddesses in the archaic period, but poppy heads are something new.² There are, however, two bronze statuettes, in Berlin³ and Athens,⁴ the one from Kalavryta, the other from Tegea. Both represent Artemis and both carry a poppy head in their left hand. It appears, therefore, that poppy heads were especially associated with Artemis in the central Peloponnese; we should have expected to find our bronze example not on the Acropolis but at the Orthia site. Nevertheless the Spartans discriminated so little between the offerings they made at each shrine that it is not surprising, after all, if one of them brought and dedicated to Athena an object originally made for Artemis.

W. LAMB.

¹ The Acropolis example had a stalk which, before it was broken off, may have served as a pin.

² See, however, *B.S.A.* xv. p. 147, Pl. IX. 15-17. I do not think these are poppy heads.

³ Berlin, 7644. *Führer durch das Antiquarium*, p. 33. Furtwängler, *Kleine Schriften*, II, p. 465 ff. *B.S.A.* xxvii. p. 144, No. 35, Pl. XXV.

⁴ Athens, 7565. *B.S.A.* xxvii. p. 145, No. 38.

EXCAVATIONS AT SPARTA, 1906-1910.

(PLATES XI-XII.)

§ 6.—NOTES ON SOME BRONZES FROM THE ORTHIA SITE.

THE bronzes from the Orthia site are both individually and collectively of sufficient interest to bear frequent discussion, and additional notes on some of the more important items cannot come amiss. Their appearance here facilitates direct comparison with the series from the Acropolis: this is particularly useful when applied to bronzes which, like Acropolis Nos. 4 and 6, and Orthia Nos. 13-16, are presumed to be of Spartan manufacture; it is also illuminating in the case of minor objects, some of which, like the votive fruits and the miniature vases, are common to both sites, while others, like the Geometric animals, are associated with one site only.

Geometric Period.

Nos. 1-3 are fibulæ of different kinds.¹

No. 1 (length .073 m.) is of a simple type resembling Blinkenberg's V. 3b,² except that the bow is less arched and the catch-plate is not the least concave on its upper edge.

No. 2 (length .067; ht. .047 m.) belongs to the type characterised by its large catch-plate and ambiguously called Helladic because it was evolved north of the Corinthian gulf.³ Professor Droop, in publishing two other examples from the Orthia site, comments on its rarity at Sparta.⁴ Our fibula has three large knobs on the bow, and a catch-plate ornamented with small circles: this was a favourite decoration at Sparta and at other Peloponnesian sites in the Geometric and Archaic periods.

¹ Sparta Museum Inventory, 2167. (Inventory numbers are omitted only when they cannot be ascertained.)

² C. Blinkenberg, *Fibules Grecques et Orientales*, p. 109, Fig. 124 (type épirote).

³ Blinkenberg, *op. cit.*, p. 128.

⁴ *B.S.A.* xiii. p. 112; see Fig. 3, *h* and *m*.

No. 3 (Fig. 1¹) (ht. .055 m.) is of a shape which originated in Asia Minor and is distinguished, among other things, by the symmetry of the two ends of the bow. Such fibulae, being heavy, were usually worn with the bow upside down, hanging from the pin.² Since they retained their popularity for a long time, we cannot be sure if our example belongs to the Geometric or to the succeeding period.

Slightly different versions of the same shape occur at the Argive Heraion,³ and very similar ones at Ephesus⁴ and Troy.⁵

On figure 3 is a selection of other objects of the Geometric period. These shew that Spartan Geometric art included a greater variety of types

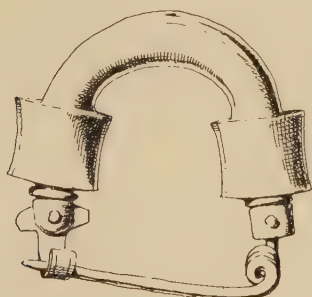


FIG. 1.—BRONZE FIBULA, No. 3.
(Scale 2 : 3.)



FIG. 2.—BRONZE JUG, No. 5.
(Scale 1 : 2.)

than might be supposed. Some of these types, particularly the more developed, have, as we should expect, parallels in the Argolid and at Olympia, but many of the earlier are either definitely northern or have more parallels in the north than in the south.

This northern connection presents interesting problems. Not only is it stronger at Sparta than at other Peloponnesian sites, but certain of its manifestations, such as the miniature vase No. 5, occur at Sparta and in Thessaly and Macedonia, but are rare or non-existent at any of the intermediate sites.⁶

¹ Figs. 1, 3-6 are from drawings by P. de Jong.

² Blinkenberg, *op. cit.*, pp. 204 ff.

³ Waldstein, *Argive Heraeum*, ii, Pl. LXXXVII; see especially No. 901.

⁴ Hogarth, *Excavations at Ephesus*, Pl. XVII. No. 15.

⁵ Dörpfeld, *Troja und Ilion*, i, p. 414, Fig. 433.

⁶ A small jug from the Acropolis (de Ridder, *Catalogue*, p. 54, No. 163) resembles our No. 5, but has not the characteristic lip. This is also true of *Aegina*, Pl. 118, No. 16.

No. 4. Pendant ¹ (ht. .034 m.). Compare the pendant from Tegea, *B.C.H.* 1921, p. 369, Fig. 22, No. 89.



FIG. 3.—BRONZES OF THE GEOMETRIC PERIOD. (Scale 4 : 5.)

Nos. 5-7. *Miniature Vases*. No. 5 is the earliest of the various miniature bronze vases which are found in all Spartan sanctuaries (Fig. 2).² Jugs with cut-away necks are particularly associated with Thessaly and

¹ Inv. 2188.

² A photograph of No. 5 will be published in a later volume.

Macedonia, and of the other bronze jugs of this size and shape known to me, all save one come from excavated sites in this area. Three at least were found at Velestino (Pherae) ¹ and one at Chauchitsa : ² the exception was bought in the bazaar at Athens in 1921 and is now at Cambridge.

Two long-necked jugs, Nos. 6 and 7, may also be attributed to this period. Similar jugs were found in considerable numbers at Velestino.

Nos. 8-11 (Fig. 3) are *animals and birds*. The birds on discs, Nos. 8a and 8b, ³ are especially common at Velestino : there are good examples at Delphi and Tegea. ⁴ Parallels for the 'peacock,' No. 9 (length .075 m.) occur at the Argive Heraion, at Tegea, ⁵ and, in greater numbers, at Velestino. The familiar circles appear as 'eyes' on the peacock's tail in the Spartan, Arcadian and Argive examples.

No. 10. ⁶ The fawn (ht. .055 m.) is one of the less common Geometric animals : compare a fawn from the Heraion ⁷ and a deer and fawn from Olympia. ⁸ The deer, No. 11 ⁹ (ht. .065 m.), must belong to the end of the Geometric period : an earlier deer was found at the Heraion. ¹⁰

No. 12. (Pl. XI.) Man seated on openwork stand ¹¹ (ht. .07 m.). The bits of bronze between the hands and the chin, the man and the seat, are due to the limitations, not to the intention, of the bronze caster. Only one other human figure in bronze belonging to the Geometric period was found at Sparta. No. 1, on pp. 82 f. (Pl. VIII), of a type entirely different from No. 12. The latter is unusual, and only two similar figures are known to me. One was in the Athenian market in 1925, the other comes from the excavations at Tegea. ¹²

Archaic Period.

The bronzes of the Archaic period include four statuettes, all of which appear to have been made at Sparta. Nos. 13 and 14 belong to one well-

¹ The Velestino bronzes are still unpublished.

² *B.S.A.* xxvi. Pl. IV.

³ Inv. 2165. The example on Fig. 3 is .076 m. high.

⁴ *Fouilles de Delphes*, v. p. 47, Fig. 145. See also *B.C.H.* 1921, p. 350, Fig. 10.

⁵ Waldstein, *op. cit.*, Pl. LXXVII. Nos. 46, 47. *B.C.H.* 1921, pp. 345, 350. Possibly cocks.

⁶ Inv. 2163.

⁷ Waldstein, *op. cit.*, Pl. LXXIII. No. 20.

⁸ Athens, 6193. *Olympia*, iv. Pl. XIV. No. 219.

⁹ Inv. 2161.

¹⁰ Waldstein, *op. cit.*, Pl. LXXXIII. No. 19.

¹¹ Inv. 2155.

¹² *B.C.H.* 1921, p. 355, Fig. 17, No. 52.

defined Spartan group, No. 15 to another; No. 16 represents a subject which was a favourite with Spartan artists, but we cannot be quite certain as to its origin owing to the bad condition of the surface. Of all the bronzes from this site, the best and most interesting is the little lady, No. 13: its style is distinctive, its connections are important, and it belongs to an early stage in the development of Spartan art.

Among the smaller objects, the ill-preserved fibula with the siren, the *protomai*, the tortoise, No. 19, and the fruit, No. 25, were probably made at Sparta, though it is possible that some of the other bronzes were made there too.

No. 13.¹ (Pls. XI and XII.) Female figure (ht. .077 m.). Behind the feet is an attachment through which runs a nail-hole: evidently the figure decorated some object now lost. The position of the attachment suggests that this object may have been the handle of a skyphos, like the one from the Heraion.²

The lady wears on her head a remarkably small *polos* (cf. the Sphinx, No. 18). Her hair is tied behind by two ribbons which cross each other diagonally: a good parallel is provided by the woman who forms a mirror support, from Vonitsa, now at Berlin, who is considered by most archaeologists to be Spartan.³ The dress is bound at the waist and has a short apoxygma, falling lower at the outer corners. It reminds us of the dress of some of the Ephesian ivories,⁴ but recalls still more closely a small bronze from Mount Lykaion at Athens⁵ attributed by Langlotz to Sparta (Pl. XII). This bronze has many other points in common with the lady from the Orthia site: the eyes, higher at the outer corners; the strongly marked upper and lower lids and tear ducts; the smiling lips; the nut-cracker jaws. It is certainly by the same hand, though it may be slightly later in date: both, however, belong to the first half of the sixth century.

No. 14. (Pls. XI and XII.) Female figure⁶ (ht. .067 m.). This bronze, heavily incrustated, represents a woman wearing a wreath and a Doric peplos girt at the waist. Her hair is parted in the middle. The

¹ Inv. 2148.

² Waldstein, *op. cit.*, Pl. CXVIII. No. 2034.

³ Berlin, 10820 = *Jahreshefte*, 1915, p. 57, Fig. 30; Langlotz, p. 86, No. 11.

⁴ Hogarth, *op. cit.*, Pl. XXIV, No. 3.

⁵ Langlotz, *op. cit.*, p. 87, No. 22, Pl. 49 a.

⁶ Inv. 2148.

lower part of the body is flat in front and almost square in section, a feature which many Spartan bronzes inherit from their ancestress, the seventh-century lady from the Menelaion.¹ Our bronze from the Orthia site belongs to the same group as the Apollo from Amyclae² and the similar figure from Olympia,³ though it is earlier than either of these figures. It should be dated in the middle years of the sixth century.

No. 15. (Pl. XI.) Flute-Player⁴ (ht. .093 m.). At present this bronze is thoroughly corroded: we can, however, see that it portrays a naked woman, that she wears some sort of head-dress, and that her hands are occupied with what looks like a double flute, the left hand being held lower than the right.

The woman is, probably, a member of the well-known series of naked female votaries playing musical instruments: ⁵ most were mirror supports, but this bronze was, I think, a free figure, like the girl in the Trau Collection,⁶ who is closely related to them, and the new figure from the Spartan Acropolis.⁷ The instruments which the votaries affect are usually castanets: flute-players are represented by the well-known bronze from Dodona⁸ and by the new bronze from Samos,⁹ but these are both men. For women flautists we must turn to the vase paintings.

No. 16. (Pl. XII.) Lady with cymbals¹⁰ (ht. .112 m.). The bronze is dark green and heavily encrusted. It represents yet another musician, a woman playing cymbals. She wears a wreath and a Doric peplos with a short apoxygma: the folds are shewn only on the back of the dress, as so often in the case of archaic bronzes and statues.¹¹ The bad preservation of the surface makes us uncertain whether anything was supported on the head, but the base is more appropriate to a supporting than to a free figure. There are, apparently, no curls in front of the ears, but the hair behind falls well below the waist, and is confined by a ribbon.

17. (Pl. XI.) Fibula with siren (ht. .04 m.; length .044 m.). The siren is badly diseased, the fibula in comparatively good preservation.

One of the siren's hands is extended and both wings are spread.

¹ *B.S.A.* xv. Pl. X.

² 'Εφ. 'Αρχ. 1892, p. 18, Pl. 2; Langlotz, Pl. 49 *e*.

³ *Olympia*, iv. Pl. VII. No. 48, Langlotz, Pl. 49 *b*.

⁴ Inv. 2149.

⁵ See pp. 85 f.

⁶ Langlotz, p. 86, No. 15, Pl. 45 *b*.

⁷ See pp. 85 f.

⁸ Athens, Inv. 25. Carapanos, *Dodona*, Pl. X. 1.

⁹ See *J.H.S.* xlv. p. 243.

¹⁰ Inv. 2149.

¹¹ Cf. *Jahreshefte*, 1901, p. 35.

Contrast the siren with the lotus head-dress from the Spartan Acropolis : what head-dress the siren on the fibula wore is uncertain. On the ends of the fibula are engraved palmettes.

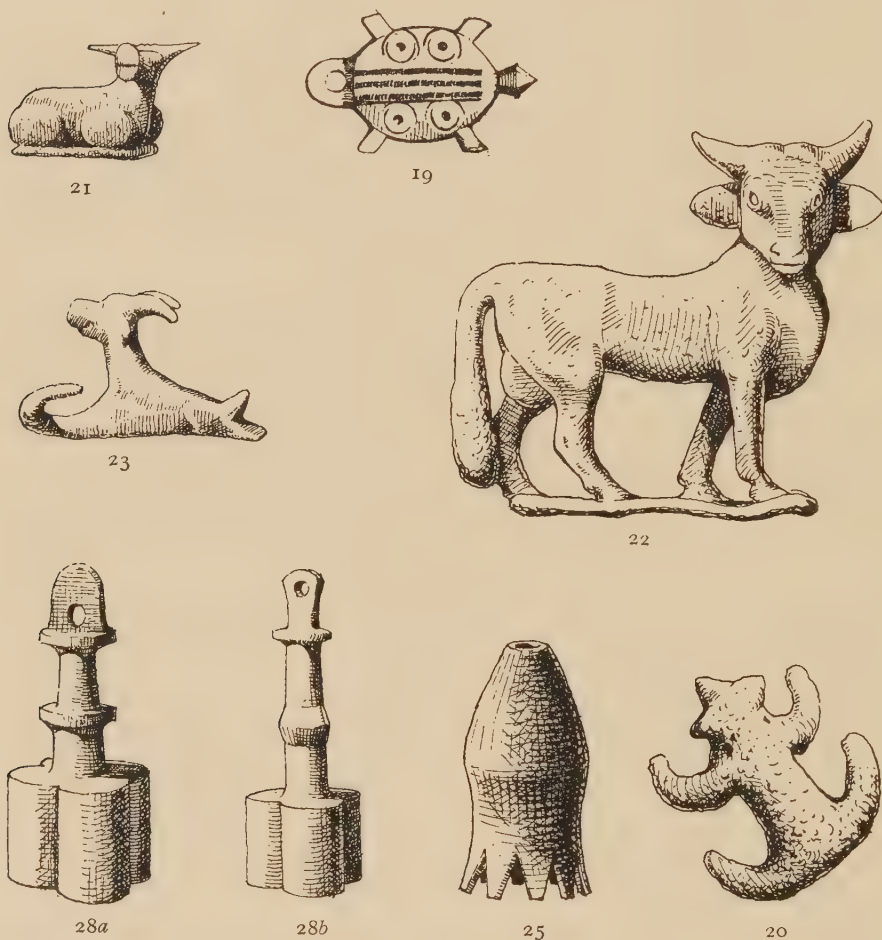


FIG. 4.—MISCELLANEOUS BRONZES. (Scale 4 : 5.)

No. 18. (Pl. XI.) Sphinx¹ (ht. .077 m.). She wears a small *polos*, like that of the lady No. 13, and her hair is arranged in strands. The purpose of the bronze is uncertain, for, while it is hollow behind, it is

¹ Inv. 2150. Mentioned *B.S.A.* xvii. p. 17.

provided on the left-hand side with a small hook.¹ The only parallel known to me is No. 23 below.

On Fig. 4 are *animals* of the Archaic period.

No. 19² (·037 m. long) is a conventional tortoise, with a ring for suspension where his tail should be. The style is one suitable for ivories: compare two ivory tortoises from the Orthia site.³ No. 20⁴ (length ·04 m.) is a frog decidedly more primitive than the new frog from the Acropolis (Fig. 5, No. 19, pp. 90 f.). No. 21⁵ (ht. ·02 m.) is meant for attachment, probably to the edge of a vase; there exists another bronze cow, larger, but evidently made for the same purpose. No. 22⁶ (ht.

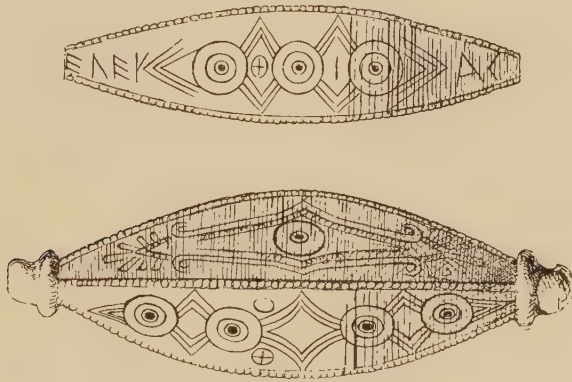


FIG. 5.—BRONZE DIE, No. 26. (Scale 2 : 3.)

·062 m.), a third cow, is flat behind, and must have decorated the neck of a krater, like the one in Filow and Schkorpil, *Archaische Nekropole am Ochrida-See*, pp. 39-41, Fig. 35. The little deer,⁷ No. 23 (length ·04 m.) is evidently a hook.

No. 24. (Pl. XI.) Handle of bowl⁸ (width ·097 m.). It is decorated with horses' heads heavily incrustated.

No. 25. (Fig. 4.) Fruit or seed vessel⁹ (ht. ·04 m.). Compare the ivory fruit from the same site.¹⁰ For discussion, see pp. 94 f.

No. 26. Die¹¹ (length ·11 m.). One of the dice from the Orthia site

¹ Miss Whitfield makes the suggestion that the sphinx was part of the clasp of a belt; in this case, the hook would have corresponded to a ring on the opposite side of the belt.

² Inv. 2163.

³ B.S.A. xiii, p. 101, Fig. 31 and xii, p. 328, Fig. 5 a.

⁴ Inv. 2163

⁵ Inv. 2163.

⁶ Inv. 2161.

⁷ Inv. 2151.

⁸ Inv. 1258.

⁹ Inv. 2162.

¹⁰ B.S.A. xiii, p. 99, Fig. 30 d.

¹¹ Inv. 2147.

has already been published :¹ the other (Fig. 5) differs from the published example and from the dice found at the Menelaion² in having the numbers shewn, not by holes, but by engraved circles. These circles are combined with patterns in outline : on one of the sides is an inscription ($\Xi^{\wedge}\Xi\vee\oplus\mid\Lambda\langle$), on the other, the letters $\bigcirc$ and $\oplus$. For further discussion, and for an explanation of the appearance of an offering to Eileithuia in the sanctuary of Artemis Orthia, see *B.S.A.* xxiv. p. 102.

The engraved patterns recall those on the siren fibula, No. 17 above. It should be noted that there is no regular order for the spots on Spartan dice.

Nos. 27, 28. The same site also produced miniature spear-heads and a pair of weights,³ one (ht. .055 m.) with four lobes weighing 56 grammes, one (ht. .05 m.) with three lobes, weighing 30 grammes, both with rings for suspension (Fig. 4). They are paralleled by weights from Lusoi (ht. .047 m.)⁴ and Tegea.

Protomai (Pl. X).⁵

No. 29 (ht. .09 m.). Very much incrustated. There are no holes for attachment.

No. 30 (ht. .039 m.). This is of the more ordinary type, represented by many terracotta *protomai* and discussed on p. 93. There are two nail-holes at the left side of the head.

No. 31 (ht. .054 m.). The finest of the series : notice the careful engraving of the hair. There are two nail-holes, one at either side of the head. The *protome* from the Menelaion⁶ reappears on Pl. X for comparison.

Miniature Vases.

No. 32. A number of these from the Orthia site are illustrated on Fig. 6. The jug with the high neck (ht. .053 m.) is descended from the high-necked jugs which we attributed above to the Geometric period, nor can it, in spite of the more ornate finish to the upper end of the handle,

¹ *B.S.A.* xiii. p. 115, Fig. 5 *d.*

² *B.S.A.* xv. Pl. IX. Nos. 11, 12.

³ Inv. 2188. Mr. Seltman informs me that the weights have no relation to the Pheidonian or Attic-Euboic systems, but might correspond to the Roman : 8 denarii = 31.12 grammes (our 30 g.), and 15 denarii = 56.35 grammes (our 56 g.).

⁴ *Jahreshefte*, 1901, p. 50, Fig. 70. *B.C.H.* 1921, pp. 369 ff.

⁵ Inv. 2159 (Nos. 29, 30) Inv. 2207 (No. 31).

⁶ *B.S.A.* xv. p. 145, Fig. 13, No. 17.

be far removed from them in date. It is covered with the familiar concentric circles. The fragmentary jug with the trefoil lip and the tongue pattern on the shoulder (ht. .057 m.)¹ reflects a type of jug which was made in the North-Eastern Peloponnese at this period.² Phialae are most common: there are six plain phialae,³ and one with flutings like the petals of a flower⁴ (diam. .095 m.). This shape is one represented by the

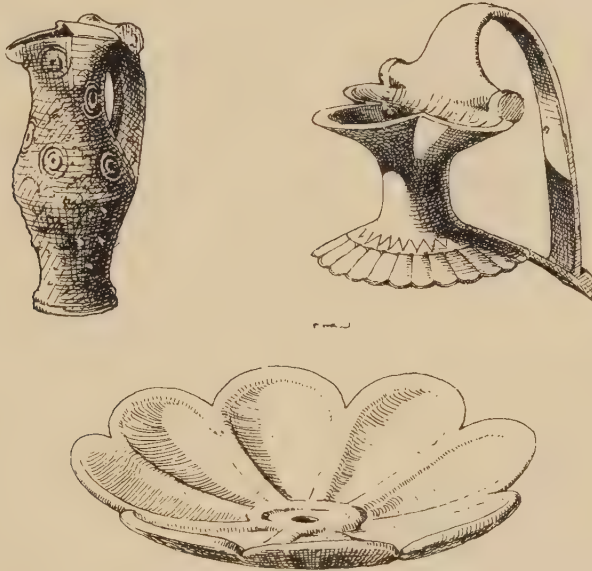


FIG. 6.—MINIATURE BRONZE VASES. (Scale 2 : 3.)

full-sized gold phiale from near Olympia, now at Boston,⁵ by a bronze phiale from the excavations at Olympia,⁶ and another phiale, also in bronze, discovered at the Heraion in Samos.⁷ Gifts of miniature vases were made, not only on the Spartan Acropolis and at the Menelaion,⁸ but also at Pherae, Athens, Aegina and Olympia.⁹

The miniature pottery vases from Spartan sanctuaries are already well known: it is curious that they have no shape in common with the examples in bronze.

¹ Inv. 2162. *B.S.A.* xv. p. 27, Fig. 4 c.

² *E.g.* Athens, Inv. 7586.

³ Inv. 2556.

⁴ Inv. 2168.

⁵ *Cambridge Ancient History*, Plates, i, pp. 274-5.

⁶ *Olympia*, iv. No. 882.

⁷ *J.H.S.* xlv. p. 243.

⁸ Only one example from Menelaion, a high-necked jug.

⁹ Pherae: see p. 99. Olympia: see *Olympia*, iv. Pl. LIII. Nos. 889-91. For Athens, see De Ridder, *Catalogue des Bronzes trouvés sur l'Acropole*, Nos. 162, 164. For Aegina, *Aegina*, Pl. 118, No. 16.

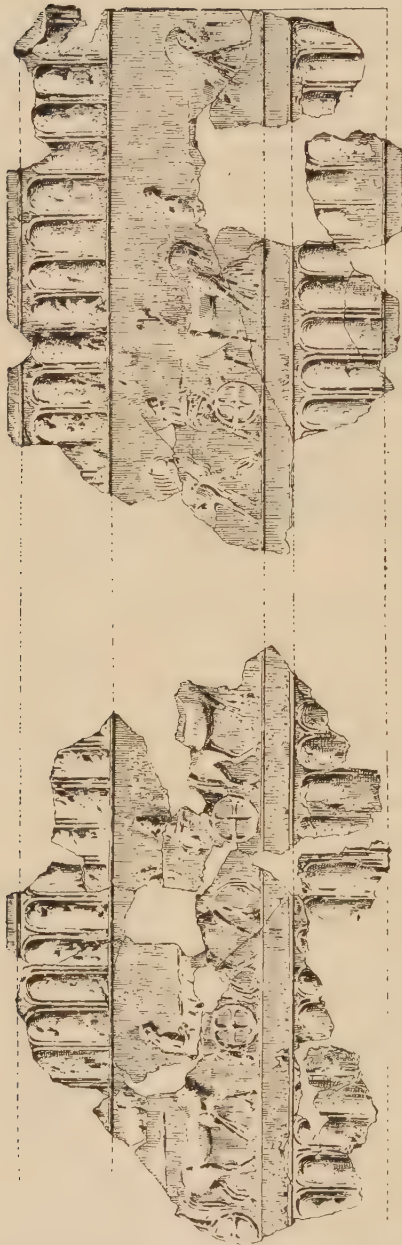


FIG. 7.—BRONZE PLAQUE. (Scale 1 : 3.)

Relief.

A bronze plaque (Fig. 7) has been reconstructed from two fragments ($\cdot 15 \text{ m.} \times \cdot 285 \text{ m.}$ and $\cdot 155 \text{ m.} \times \cdot 17 \text{ m.}$ respectively). On it is a procession of chariots moving at a walking pace to the right. Unfortunately, the preservation is so bad that we cannot be sure whether there is a border composed of diagonal rows of dots above the design, or whether the effect is due to efflorescence.

In examining the bronzes from almost any Greek sanctuary, we find that a sudden decrease in number or even a total cessation of bronze offerings occurs at some period during the fifth century, sometimes at the beginning, rarely at the close, most frequently during the first quarter.

That the bronzes from the Orthia site should, with a few unimportant exceptions, belong only to the Geometric and Archaic periods need not, therefore, surprise us. Here is one of the sites where the bronzes, like the terracottas, ceased early. A remarkable contrast is presented by the Chalkioikos site, which is one of the most striking instances of

the continued popularity of bronze dedications during the later fifth century.

W. LAMB

SOME NOTE-BOOKS OF SIR WILLIAM GELL

II.

THIS article, continuing the account of Gell's note-books of which the first portion was published in the last volume (*B.S.A.* xxvii. pp. 67 ff.), deals only with note-book (2) in so far as it relates to his journey to Asia Minor and the adjacent islands. The numerous architectural drawings, plans, etc., of ancient sites made during this expedition by Gell and his assistants, Bedford and Gandy, are published in various volumes of the *Antiquities of Ionia* published by the Dilettanti Society, and do not concern us here.¹ A summary of the activities of the mission and a full list of the drawings appear in Vol. V. of this work (pp. 4 f. and 7 ff.).

The relation of this short diary to a fuller one in two volumes with illustrative sketches, now in the possession of the said Society, is not clear, and could only be established by careful collation; but it is not impossible that Gell either wrote up the latter at intervals from the rougher notes in the smaller book, or, when the smaller book was full, copied its contents into the larger one before continuing in it the narrative of his journey from the time of his arrival at Rhodes.²

Although neither the contents of the diary nor any one of the inscriptions are of great importance, it has seemed worth while to transcribe the former in full, for the sake of the itinerary and as a record of the incidental adventures experienced by the party; and a certain interest attaches to Gell's method of recording what he sees. Unfortunately, some of the

¹ *E.g.* in Vol. I². (1821) appeared Didyma and the Heraeum at Samos; in Vol. III. (1840), Cnidus; in Vol. V. (1915), Magnesia ad Maeandrum, Myra and Lycian tombs, and other Lycian sites, together with Lindus in Rhodes.

² Sir Cecil Harcourt Smith, to whom, together with Mr. George Macmillan as joint-secretaries of the Society, I am indebted for valuable information concerning the Gell material in the Society's possession, tells me that the dates in the fuller version overlap those of the smaller one at both ends; and that in the former are contained about 180 inscriptions in all. I hope to collate these two versions, with the kind help of Sir Cecil Harcourt Smith, when an opportunity arises, and to deal fully with the remainder of the inscriptions in a subsequent publication.

entries are in very faint pencil, and, especially in his account of the Heraeum at Samos, some portions are quite illegible. Of the inscriptions, which number only 23, about half appear to be unpublished, but include nothing noteworthy. An archaic inscription (No. 12) on the back of one of the statues on the Sacred Way at Didyma is unintelligible; a late metrical dedication by a priest of Apollo (No. 10) from the adjacent port of Jeronta is incomplete and defies full restoration; but we may claim a certain historical interest for the statue-base (No. 9, also incomplete) of an unidentified citizen of Miletus, who amongst other distinctions attained to the dignity of Roman Senatorial rank. Among the texts previously published we may note specially Gell's copy of the Hermesianax dedication (also on a statue on the Sacred Way, but now lost), for this was the copy which served as the basis for Boeckh's publication, *C.I.G.* 39.¹

ITINERARY OF GELL'S EXPEDITION.

April 30, 1812.	Leave Athens.
May 6.	Land at Smyrna.
„ 7-17.	At Smyrna.
„ 17, night.	Leave Smyrna.
„ 18.	Clazomenae.
„ 19.	Saip Island.
„ 20.	'Wind contrary.'
„ 21, night.	Land at Chios.
„ 22.	To Consul's country-house, <i>ibid.</i>
„ 23-25.	<i>Ibid.</i>
„ 26.	Leave Chios.
„ 27.	Reach Samos, Vathy.
„ 28 to June 18.	} At Samos.
„ 19.	
„ 20-27.	At Jeronta and Didyma.
„ 28 (?).	To Cos.
„ 29(?).	To Budrum (Halicarnassus).
July 1.	To Cnidus.
„ 2-16.	At Cnidus.
„ 17.	To Rhodes. (End of Diary.)

¹ The differences of reading are discussed below, p. 119, No. 6

'VOYAGE TO SMYRNA.'

F. 6 (r.). 'Quit Athens April 30 in a Hydriote Ship for which pay 300 dollars to Smyrna—anchor on May 1st at a desert port in Thermia 2 hours from the town—The water rises up hot, instantly on digging in the sand. a town and a village— They live in fear of the Pirates—Stay there on the 2d of May, on 3d sail-becalmed & between Andros and Tinos on morning of 4th. At night nearly lost by ignorance at Scio—on 5th pass Karabornou & enter gulph of Smyrna, wind foul—The Mountain 2 Brothers quite beautiful qu(ery) Koracesium the wind falls & we are becalmed near the castle after having almost run on the sands of the Hermus, on May 6 land at Smyrna.'

F. 6 (v.). (Sketch plan of Smyrna hills.)

F. 7 (r.). 'The ancient Smyrna on the opposite side of the bay & at end of Gulph. Many ruins of walls & towers. A hill now seems to have been once an island & to have formed the port. many circular towers. walls of all ages, very fine situation. The castle above Smyrna on the old foundations or near it (*sic*). Circular towers at SW end very entire. fine view over plains of Bornovo & Bugia & Meles as far as Sadikeui see also qu(ery) Mt Mycale & Aleman Sipylus Dag tali Coracesius & gulph of Smyrna.

W of the castle on same hill 150 yards dist is the site of Stadium—N is the site of Theatre, & by this the walls of the ancient town may be found—The city extended hence towd the Jewish burial ground—It is possible the present city must have been sea as otherwise the town must have had only an open road for ships. The soil is now low quite flat and the place seems constructed on purpose for the plague & the ague. Quit Smyrna on the night of May 17 1812 during which it rained often & also during the next day—

May 18 examine Clazomenae—

19 at Saip island under Mimas

20 wind contrary tack near Carabornou.'

F. 7 (v.). (Sketch map of Smyrna and district.)

F. 8 (r.). 'at Clazomenae.'

(Inscription No. 1.)

'from Smyrna Vourla by compass 81 30 W of N

from Clazomenae Smyrna castle S 87 E

Vourla 33 W o(f) S & Alexander's causey

Brothers N point 74 E o S, other 71

E old Smyrna & Sipylus. Isle about 35 E. of N

& do W of S general range of Clazomen(a)e¹

¹ This extract may serve as a sample of the author's careful recording of bearings; subsequent entries of this sort, and details of latitude and longitude, are usually omitted from my transcript.

F. 8 (v.). ' at Clazomenae a Doric 1 foot 3 diam
upper diam '

(Sketch of Doric capital.)

' Small Ionic white marble by it & cave W of S point of isle

Doric white stone faced 2, 6 diam

a capital doric near it. top diam of pillar

2 feet-abacus 2, 8, 24 height of cap 1, 1, 6 '

F. 9 (r.). ' Under Mimas ' (page of bearings omitted)

F. 9 (v.). ' May 30

From Karabournou highest Mt of Scio is SW $\frac{1}{2}$ W ' (and other bearings, omitted).

F. 10 (r.). (Bearings, continued) and

(Inscription No. 2.)

F. 10 (v.). ' 21 at night Land at Scio, Consul very civil

' 22 go to Consuls country house after visiting Homers school 3 miles N, Consuls house half way. The Homers school and fount. a detached rock see view qu(ery) altar of Cybele. Consuls Villa quite delightful rich view of Villas & gardens, no ground seen. Look at many of them & draw on 23, in the mean time our Hydriote Captain & his son quarrel declare off the bargain for ship & by exertion of our Dragoman is forced to repay the 200 dollars we had advanced.

This detained us again & with much work we got a Saccoleva for Samos for 300 piastres. The town of Scio like an Italian town of good stone streets well paved & clean—narrow Genoese & Venetian, port anciently very good They say 60 villages, 160000 inhabts. free at joking, odd dress—Catholics'

F. 11 (r.). ' 24th go up a hill near Livadia called anciently Latomia blue and red ugly marble + (Church) ¹ Panagia Latomita traces of the old work quarries. fine view. Acqueduct

On 25th ride on a mule up many hills to a source or rather 2 arches whence water runs to city. Thence to Caries Καριες a village. Still higher. streets many (among ?) trees flat roofs—Walnuts &c. Ascend very bad road, pines—cross a summit between 2 rocks & descend to $\boxplus$ (monastery) ² Neomeni (*sic*) Wonderful No of Towers odd sight. People not uncivil gave us coffee.

Monastery Neomone. Panagia—no woman enters, built by Constantine Monomaxi—One real capital like ³—Cistern with 8 columns. 2 hours from city. The marbles of the isle dirty blue & red.

The church is entirely overlaid with dark marbles Monastery has at least 80 towers with pointed roofs and many more flat

¹ A small + is Gell's usual abbreviation for a church, in contrast with ×, which he sometimes uses for the verb 'to cross.'

² $\boxplus$ A square enclosing a cross is his abbreviation for 'monastery.'

³ A short word beginning with 't' is left in faint pencil, most of the rest of the page being in pencil inked over.

360 monks altogether.

On a hill N of monast of Neomeni are ruins suppose not Ellenic (*sic*). Precipitous rock—lofty—

Tuesday 26 sail in a sacoleva from Scio after dinner with fair wind but rainy & appearance of storm. pass between the 2 small islets arrive at Samos in a favourable storm next day 27 lodge at Civini the English Consuls.'

F. 11 (*v.*). (Bearings taken at Samos from hill above Vathi, omitted.)

F. 12 (*r.*). (Ll. 1-3 the same, continued.)

Ll. 4 ff. :¹ 'Vathi to Chora ascend (one hour?), see port colonna & cape Mycale (?) L pass a fount, vines (?), oaks (?) small leaved descend by a large overhanging rock on L. εις τους σπηλαιες. view of valley (?) of Metelinous, white soil—rivulet & lovely Rhododend(rons?)—bushes—soon after an ancient stone—in 2 hours Metelinous large village Ruins of the old acropolis were visible from σπηλαιες, myrtles cistus & broom—x (cross) a low ridge—descend—pretty glen R with corn—+ (church) L. get into gently (pretty?) rising glen with stream. + (church) R Panagia—Road on terrace descend. Pretty stream fount called athanato Nerro (*sic*) enter Chora visit Bishop—Aga & Primate—Aga a German.'

F. 12 (*v.*). (Ll. 1-8 : bearings from port Tigani, etc. omitted.)

Ll. 9 ff. : 'Tower at Samos 6—thick loop holed 35 (?)—E one hole N. 9 feet to door Door 4 feet wide 7 feet high, windows inside abt. 3 feet by 2, without 10 in by 3 feet.

The great NW Mt called Kalabasi (?) or—certainly.'

(Ll. 15-17 and

F. 13 (*r.*). Ll. 1-3, bearings, omitted.)

(Ll. 4-6 illegible.)

Then sketches, section and elevation of piece of cornice with ovolo and acanthus, drawn upside down.

(Ll. 7-13. (Bearings, continued, omitted.)

F. 13 (*v.*). (Sketch of position of Agiani and Acropolis, and profile of Doric capital and abacus.)

'At Agiani 2 + St John S. George 1 hour 10 min to Agiani (?) find the aqueduct 30 min to river. Crossing river ascend, bad road lose the way. Water running. a cistern a Kalybea. Caruba tree above 6 feet in diamr. Pomegranates figs olives, wild Quinces. Judas trees—Road at length impassable so return & ride down valley of great river from Metelinous by a + (church) & mill L to plain called Miso Campo—port of Mollah Ibrahim. turn sharp L ascend by some houses & a + (church) L & fount R. 50 minutes

F. 14 (*r.*). to a bare top whence see village of Palaio Kastro a mile R. There

¹ Pencil, only occasional words being inked over, and in places very hard to decipher.

is a fount near it. Turn sharp to L & descend by a dreadful road to Vathi which reach in one hour from the plain. Hence through streets dreadfully crooked & dangerously steep to the Consuls house at the port one hour & 1/2 from Miso Kampo. Population of whole island not 50000. ☐ (monastery) Stavro abt one hour NW of the Heraeum where is fine water.

1/2 p 1 quit plain by Miso Kampo

1/2 p 2 Vathi at 3 consuls house—'

F. 14 (v.). (An unintelligible sketch, and notes in very small and faint writing, with occasional words inked in over the pencil.)

'The col(umns of the temple 'at?) Samos never seem (?) (completed ?) probably they (their??)——temple was very (left??) unfinished it is a very clumsy performance as it appears at present—and except the bases nothing—at present found is what wd (?) be called well cut at (Athens?). There is a small piece of a basso rilievo which seems ancient and well done near (?) the temple. There was a fount supplied by water from the Imbrasus or from the hills near N———lost but ——under any of the Magazines (?). There must have been a Doric building——stone between the temple and sea & the whole———. The raised (sacred??) way———perhaps (?)——on the site.'

F. 15 (r.). 'Latitude at Samos May 30 1812. 73, 49, 30 declin 21 48, etc. ditto June 1, 3, 9 and 10.' (Followed by various bearings, omitted.)

F. 15 (v.). 'On a stylus Heraeum Samos' (Inscription No. 3).

'At Metelinous Samos' (Inscription No. 4).

F. 16 (r.). 'Nerro (*sic*) Trouvio one source of Imbrasus rises under a + (church) of A Taxiarchos. It does not flow after August. arches 12 of aquaduct (*sic*) near it a ☐ (monastery) Megale Panagia Above myrtles agnus castus oleanders &c. beautiful'

(Ll. 6-10 : bearings, omitted.)

Ll. 11 ff.: 'particularly Metelinous comfortable. The people of one village have bad character false.

VOYAGE FROM SAMOS.

June 19 sail at . . 15 to 12 in an hour becalmed meet a boat says the thieves are at Gaidronisi we are on point of return. think of going to Delos but a breeze springing up we turned again and passed (?) by port Panagia with isles & ☐ (monastery) to Speliai a magazine & caves under S side of Mycale—small vill(age) further on also a (tree?) & perhaps ruins very fine rocks of Mycale from E point of which——of Titanos Mt Tamus N80 E'

F. 16 (v.). 'N80 E (*sic*) from Spilia or near it line through Priene & N E end of Titanos tow(ar)d Tralles. Keliberli (?)¹ is beyond a castle Vigla on a

¹ The last letter possibly *h*.

hill & the precipices behind Priene—Still behind is another Mt probably of Magnesia (?). still further another more projecting to E, then what appears a limb of Massogia which is very large—perhaps a more dist(ant) blue mt is on other side of Philadelphieia. The end of Latmus is confounded with Titanos. The plain very flat. The isle of Lade not so small the Maeander must pass close to Miletus for it comes out quite on that side & makes a very long flat with oleanders beyond Lade. Grius not near the sea at all along uneven country between with plains and shrubbed hills—Corn ripe people from Samos went to cut it. The country hereabouts keep watch and prevent infection (?)—By keeping near the shore for from Gaithronisi (*sic*) the thieves did not come out particularly as two or 3 large Hydriote ships passed near the island—a little rock or islet near the Asiatic coast (blank) after this the port of Jeronda Kovella where land and sleep in magazine without a roof and on a oven (?) whence Mycale West top 5 W o N' (followed by 5 more ll. of bearings).

F. 17 (r.). (8 ll. of bearings, omitted. Then inscriptions Nos. 5 a and b.)

F. 17 (v.). (Inscriptions Nos. 6, 7, 8, 9.)

F. 18 (r.). (Ditto, No. 10.)

F. 18 (v.). (Ditto, Nos. 11, 12.) Referring to the former, 'many of the stones are so marked probably not peoples names for they are cut in raised squares and (?) they may however be the names of people who gave them but not workmen.'

After No. 12: 'The lower figure on sacred way 1st only wants head has drapery folded at knees, the upper one has drapery thus (sketch) 3rd is broken thrown down 4th on a high backed chair

Columns 63 feet 1 inch 6/10th Diam. 6, 7, 2. 4 in more than 9½ would be 62, 6½ 348, 5, 7.'

F. 19 (r.). (ll. 1-3: bearings, omitted.)

Ll. 4 ff.: 'From Branchidae to port along sacred way at 700 steps 20 of which equal 50 feet. Lion at 800 descend at 900 past end of tombs at 1450 stones on hill R at 2600 cross brook over a little rise between 2 eminences & a ruin into another hollow at 2900 at 3600 on an eminence with a height L with natural walls. at 3900 turn of hill to L on (*sic*) the modern port flat with vines to Panormus which is 4100 steps from Jeronta.

The temple & long columns seem all made to fall down has not the appearance of solidity observable in Doric Plague very furious at Mylasa: at Moglah has not ceased for some time. When the crier cries at Jeronta he mounts the temple

To my eye the columns 9½ diam & mor(e?) a(re?) too thin & the capitals though in themselves beautiful too small. They are now at lea(s)t so being broken. The unfinished column is fluted at top & the Tambours are thinner in

middle than at top which looks very clumsy & the great height make(s) it appear ready to fall. The outer range was probably never finished the cornice never cut at least of them—Strabos passage cannot mean that the size of the temple was such it could not be roofed only that it was unfinished as Samos was.'

F. 19 (v.). 'on June 27 quit Jeronta for Cos people fined 50 piastres each boat by the Galiote of the Bey of Boudrum for smuggling corn away but permitted to proceed.

The sacred Mycaleian fount certainly one now seen with 2 columns cut thus: (sketch) with some kind of figure on it about 200 yards S of temple. The people say tis rather salt. I could scarcely perceive it if so more (?) likely to be dedicated to Apollo. Worth digging out as the village which has above 150 houses has no source. We were only permitted to dig by way of seeing inscriptions about water to find a spring—our house cost for rent 10 piastres a day on account of harvest so many people came to reap. The inhabitants are Eleusinians Kondouriotes & (sc. ??) Salaminians & several talk Albanian crying out Skrew when we draw—The houses mostly one storey & flat-roofed—one coffee house.—The place increases fast, under Elez oglou who encourages the Greeks.

The cape W of Magazine¹ the islet & Lade in a line a way went to E as well as N from temple remains of it or a wall for 3 or 4 miles E by compass country now bushy. Shore plain a □ (rectangular) enclosure above 2 miles E of temple on road in it a kind of chasm as if for water between 2 rocks like a cistern. Many heaps qu(ery) tumuli.

About 30 years ago only 10 Turkish houses the Turks come at harvest. Much wood at that time though now none.'

F. 20 (r.). (In addition to various bearings, omitted, are the following notes:)

'At the cape is the ruin of a strong wall by the edge of water a tree on a heap probably temple of Neptune & a marble cilinder (*sic*). . . . in Cos 800 Greeks 3000 Turks & villages Antimakia Pali Kephalo'

F. 20 (v.). (Inscriptions Nos. 13 and 14.)

F. 21 (r.). (Inscription No. 15; no find-spot.)

'From Cos pass a high pyramid L on which a castle & probably a town qu(ery) Termerium & promontory pass 2 islets L at Halicarnassus in 2 hours castle has been (bas??)² reliefs but (are?) in late shape wh(ich?) make it probably Mausoleum—Lodge at the Beys very civil, above the house several foundations—Ionic base 3 feet diam—Theatre large much remains: also a deep square well in it—Above many caves now sepulchres their fronts fallen 3 chambers. at top of hill a tower foundations—the brick walls lost (?) situation

¹ Or 'Magarine'?

² Apparently the word 'bas' in pencil has been wrongly inked over as 'been.'

of castle high & detached from spot for city—modern castles. Knights of Rhodes. Shields—another on opposite side. No water now—a doric cap 2 feet plain col 18 in(ches) only one ring. do smaller 15 in diam—Ionic neck about 9 1/4 (sketch of acanthus and ovolo moulding) white marble all Corinthian cornice & frieze modillions swelled enriched with leaves & 2 altars—There is a ‘marble’ (sketch of upper part of door?) ‘not very Greek.’

F. 21 (v.). (Inscription No. 16.)

‘gave the Bey 3 okes of coffee 2 loaves of sugar. The fount Salmacis lost to the people being under water at the old decayed mole L of entrance. it boils up. The Beys son asked much about water thinking we knew how to find it

Sailed away for Cnidus. Cape Krio Tekir Bournou July 1st strong Melteme—The plague said to be diminished except at Cousades Smyrna Guzel Hissar Moglah & Mylasa. land at S port of Cnidus at 3 h 30 m. very curious winds. & fine effect coming round the point of isle. Venus & the froth here in plenty (sic)

Isle of Cnidus 47 W o N 47 E o S general run between Rhodes & Cos—Behind 1st cape to S + (church) ruined & marbles & port Kaiseb Ille Mareh above it a tomb square 2 pedestals heads & festoons’

(Inscriptions Nos. 17, 18.)

(Bearings from Cnidus.)

F. 22 (r.). (The same, continued, and notes of latitude.)

‘at Cnidus square base of pedestal’ (sketch).

(Inscriptions Nos. 19, 20, 21.)

‘Scylax says Anaea. Panionium Erasistratius. Charadrus Phocaea Acadamis Mycale opp(osite) Samos Priene under Mycale 2 ports one κλειστον Ακρωτηριον ιερον Τριωπιον.’¹

(Diary continues here on F. 23 (v.), as Gell was using the later pages of the book simultaneously, for further notes, and the two sets of entries threatened to meet, awkwardly; he then goes on to F. 23 (r.) and 22 (v.).)

F. 23 (v.). ‘Aga of Cnidus has 9 villages names Belencui Jaricui(?) Tumulcui Cheshmecui Jakan Sindi Zeitungik (sic) Masit(?) Bashachikori Oranjik The Aga pays 5 purses 1/2 or 220£ to Constantinople His rent ought to be 10000 Pias’ but has 45000 Piast

All the houses 280 of the whole set of Villages

His uncles Village 7 hours distant

Kara kui Patera Stadia Elea Kisan Hadji Sula The uncle pays 5 purses & has rent 80000 Piastres all have 500 houses Cnidus to Hadji Sula 9 Yarena 8

¹ As usual, neither accents nor breathings inserted, and s for σ.

Marmora 3 h Giovata 4 h. Ulla 3 Moglah 3. Giovata bottom of gulph of Syme & a port—

Marmara to Mylassa, Moglah 9 h by way of Giovata Giovata Jeremo 5 h—Jeremo to Mylassa (*sic*) 7 h Mogla (*sic*) to Bovasi (?) 2 1/2 Eskihissar 2 1/2. Mogla to Guz(el) Hissar 24 H Marmora to Dallama 16 H

F. 23 (*r.*). Tchiutchetchi 18 miles from Rhodes The Aga & all the people dead of the plague. July 15 1812.

VOYAGE TO RHODES.

July 17 1/2 past 9 quit Cnidus. pass Syme high rocky & barren on the side, on E side a good port & pretty town Turks & Greek with the plague pass tow'd Syme certain detached islets on the —which (?) cultivation—About 3 o'clock fairly equal with the Peroea L Loryma Mt & Castle Phoenix now tis (?) A port (?) with a Kastro, a port & islet before it. Rhodes now stretched out on our R. At 20 p 4 having long made out (plains?) villages & castles = with a large ruined fortress on a (mountain?) above a plain & village R—see also the city—path (?) white. continued series of towers or country houses in some parts After the fortress on the mt the mountains change into high flats with hills (?) looking ravines like Corinth. At 1/2 p 5 after the usual accidents anchor at Rhodes 8 hours at least 6 miles an hour'

(Bearings from Rhodes, 11 lines, continued on l. 1 of—

F. 22 (*v.*). 'LINDUS in the town an ugly ionic rough (sketch of capital) abt 2 feet at top

By land at least 11 hours. in way ☐ (monastery) & village of Archangelo very little cultivation—on an islet in the way a ruined tower & rock pigeons—opening the bay next to Lindus see an isolated rock with towers. The people call it Kamiro situated in a large cultivable plain, a vill(age) after it. On all the rocks some of which are very fine are (?) curious fine cave. Lindus all heaps of burnt stones nothing cultivated but a few gardens close to the Town. 5 + (churches). 150 houses. 20 Turk families. A Disdar in the Castle in which is a hall & arms of the Knights—Disdar's salary abt 19 (?) piastres per an(num) some of the houses built with flat & some peaked roofs all good—The Primate Philippo Lascali very civilized. The best + (church) very fine & painted—under the castle on S another port towards it some stones of the Theatre—Rock very friable The temp(le) of Minerva or a very fine tomb perhaps both 73 feet in front. 12 Doric columns a rock temple in a cave—some remains of a coat of plaister in inside & coffin holes like ovens. a terrace before it rough Mt above it. Vid(e) drawings. people remember 3 more cols standing. The entablature curious.

The flowers remain (sketch) pedestal above portico in place. a poor place houses (?) have dates not 200 years old.

Vill(age) Lardi some hours to S there an inscrip(tion) fount (*sic*) dedicated by Alex the Great. Water at Lindus comes through a subterranean channel in rock with O (circular) air holes—in qu(ery) 30—at Katavīa a vill(age) on W point of isle no trees from W wind 100 houses ’

Ff. 24–26 inclusive comprise bearings from Smyrna, Clazomenae, etc., a few latitudes and longitudes (‘ from Captn Beaufort ’), inscriptions Nos. 22 and 23, and notes of times for journeys near Smyrna (‘ Smyrna to Hagilar 2 hours—to Nymphio 3 Devren Keu 3 H—Cassabah 2 1/2 H—Achmetli 4 H a stream & pavement Sardis 2 1/2 H.’) On f. 31, end-paper, is a small sketch-plan of Rhodes. The few remaining pages (ff. 27–30) contain notes, bearings, copies of a few inscriptions, etc., in Attica; the inscriptions have been described already (*B.S.A.* xxvii. pp. 70 ff.).

INSCRIPTIONS.

1. Clazomenae.

ΑΙΟΦΟΡΟΝ	[Δία τροπ]αιοφόρον
ΣΚΑΝΕΘΗΚΕΝ	[- - - -] σ ἀνέθηκεν
ΘΕΝΤΟΣ<ΤΙΒΕΡΙΟΥ	[ἐπιμελη]θέντος Τιβερίου
ΘΕΟΔΩΡΟΥ<	[Κλαυδίου] Θεοδώρου.

The obvious restoration of lines 3 and 4 shews that not more than eight letters can be lost from lines 1 and 2. The god’s name may be supplied as Δία, for τροπαιοφόρος is used sometimes as an equivalent for the more usual τροπαιοῦχος.¹ Νίκην, the only possible alternative, is slightly too long to fill the gap satisfactorily. The cult of Zeus at Clazomenae is attested by coins, though those of Apollo and Athena, on the same evidence, were more important.

2. Chios. (?) On a low rectangular base, with a shallow cutting above.

ΦΑΙΝΟΜΕΝΟΣ	Φαινομενός
ΑΡΙΣΤΕΟΣ	Ἀριστέος.

Apparently a tombstone of the fourth or third century B.C. The rare

¹ See the examples given by Roscher, *s.v.*

name *Φαινομενός* occurs in *C.I.G.* 2227 (= *G.D.I.* 5668) and Dittenb. *S.I.G.*³ 579 B, each time belonging to a man from Chios. The finding-place of this stone is not given, but by its position in the diary Chios seems more probable for it than Clazomenae.

3. Samos (Heraeum). 'on a stylus.'

ΟΔΗΜΟΣ		Ὁ δῆμος
ΗΡΑΚΛΕΙΤΟΝΔΙ		Ἡράκλειτον Δι-
ΟΔΟΡΟΥΤΟΥΞΕ		οδ(ώ)ρον τοῦ Ξε-
ΝΟΜΒΡΟΤΟΥ		νομβρότου
ΑΓΟΡΑΝΟΜΟΥΝΤΑΔΙ	5	ἀγορανομούντα δι-
ΚΑΙΟΤΑΤΑΚΑΙΕΥΤΟ		καίότατα καὶ εὐτο-
ΝΩΤΑΤΑΜΕΤΑΠΑ		νώτατα μετὰ πά-
ΣΗΣΦΙΛΟΔΟΞΙΑ		σης φιλοδοξία[s]
ΚΑΙΛΑΜΠΡΟΤΗΤΟΣ		καὶ λαμπρότητος
ΗΡΗΙ	10	Ἡρηι.

The recipient of this honorary statue is already known from another statue-base, also erected by his city on the occasion of his victories in chariot-races at Corinth (*Ath. Mitt.* xlv. p. 33, No. 18 e = *S.E.G.* I. p. 101, 380 e).

For *εὐτονώτατα* cf. the superlative of the adjective in *O.G.I.* 315, l. 52.¹ The earlier form of *μ* in l. 4 must be due to an error in copying.

4. *Ibid.*, Metelinous. = *C.I.G.* 3795; but it is there described as 'Chalcedone Smyrnam delatum.' If this is correct, it must have been subsequently moved to Metelinous.

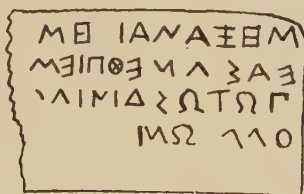
Note that in l. 2 Gell reads ΓΙΑΙΓ, but the Corpus ΓΙΓΛΙ; neither form gives us a known name. The Thracian origin of the stone is beyond doubt, on the evidence of the names; *Μοκάπορις* occurs frequently, in the form *Μουκάπορις*, especially in the great foundation-record from Pizos, now at Sofia (Seure, *B.C.H.* xxii. pp. 480 ff., 520 ff. = Kalinka, *Ant. Denk. in Bulgarien*, No. 34).

5. 'These on two sides of same parian marble at Covella port of Jeronta.' = *C.I.L.* iii. *Suppl.* 7150 on left, and *C.I.G.* 2870 on front. Gell's copy adds nothing to those published.

¹ *Εὐτονώτατος* ἦν τὰ Ῥωμαϊκὰ προτείνων. I have not found the superlative adverb elsewhere.

6. 'On a marble chair with a statue at Didymae.'

= C.I.G. 39 (Leake, *Asia Minor*, p. 239; Roberts, *Gr. Epigraphy*, I. No. 136, etc.).



Gell's copy, said to have been communicated to Leake, differs in several points from that published by the latter, and is even more unlike the very small facsimile shewn, with a drawing of the statue, in *Antiquities of Ionia*, I², Pl. on p. 29. In both these published versions the ξ in line 1 is shewn, and the word $\alpha\nu\epsilon\theta\eta\kappa\epsilon\nu$ is recognised in l. 2, whereas the reproduction of Gell's diary-copy shews that he read the last four letters of l. 2 as $\pi\epsilon\mu$ instead of $\eta\kappa\epsilon\nu$.¹

7. *Ibid.*(?). Apparently broken on left.

ΠΕΡΕΥΧΗΕCICINNIOY

ΥΛΧΚ

ΟΝΤΕΚΝΟΝΑΥΤΟΥ

[Υ]πὲρ εὐχῆ(ς) Σισυννίου

- - -

[καὶ τ](ὦ)ν τέκν(ω)ν αὐτοῦ.

I can make nothing of line 2; possibly it is meant for the end of line 1, crowded out by his drawing the outline of the stone without leaving room for the last symbols. In this case we should read $\Sigma\iota\sigma\upsilon\nu\nu\acute{\iota}\omicron\upsilon\kappa[\alpha\lambda\acute{\iota}]$, the sign in between being a leaf-ornament.

8. *Ibid.* 'On a pedestal.' = C.I.G. vol. ii. p. 1119, 2883 b.

9. *Ibid.* Incomplete above, and a few letters lost on r.

¹ Note also that Leake's version of l. 3 is again different, for he reads $\delta\epsilon\omega$ for Gell's $\delta\sigma\omega$, and makes the second sign Λ not Λ , herein resembling the copy made by Cockerell (cf. Roehl, *I.G.A.* 486 b). Gell's diary-copy does not help us to identify the name in this line, but seems to indicate that it ended $\alpha\upsilon\tau\delta(\acute{\epsilon})\omega$. It seems clear at any rate that Leake 'improved on' Gell's diary-copy, and that the illustration in the *Antiquities of Ionia*, l.c., was not taken directly from it; the latter was drawn by Gandy, perhaps without Gell's version at hand.

ΤΡΟΣΑΡΧΙΕΡΕΩΣΠΡΟΦΙ
 ΓΥΜΝΑΣΙΑΡΧΟΥΤΩΝΤΡΙΩΝ
 ΜΝΑΣΙΩΝΚΑΙΠΑΙΔΟΝΟΜΟΥ
 ΔΟΣΣΕΙΣΤΕΑΡΓΥΡΙΚΑΣΚΑΙΣ
 ΤΩΝΙΚΑΣΚΑΙΠΑΡΑΠΡΑΣΕΙΣ
 ΠΟΙΜΕΝΟΥΑΥΤΟΣΔΕΠΛΑΤΥ
 ΜΟΣΔΗΜΟΥΙΟΜΑΙΩΝΠΕΜΠ
 ΜΕΝΑΠΟΤΗΣΑΣΙΑΣΟΛΗΣΕΚΤΟ
 ΩΝΟΣΕΙΣΣΥΓΚΛΗΤΟΝΕΙΣΕΛΟ
 ΑΠΟΔΕΜΕΙΛΗΤΟΥΚΑΙΤΗΣΑΛΛΗ
 ΩΝΙΑΣΜΟΝΟΣΚ' ΙΕΡΩΤΟΣΑΡΧΙΕΡΕ
 ΤΟΥΣΙΕΡΑΣ ΓΑΤΩΝ

[- - - - - πα-]
 τρὸς ἀρχιερέως προφή[του]
 γυμνασιάρχου τῶν τριῶν [γυ-]
 μνασίων καὶ παιδονόμου, [ἐπι-]
 δόσ<σ>εις τε ἀργυρικὰς καὶ σ[ει-]
 5 τωνικὰς καὶ παραπράσεις
 ποι(ησα)μένου, αὐτὸς δὲ πλατύ[ση-]
 μος δῆμον ('P)ωμαίων πέμπ[τος]
 μὲν ἀπὸ τῆς Ἀσίας ὅλης ἐκ το[ῦ αἰ-]
 ῶνος εἰς σύγκλητον εἰσελθ[ὼν]
 10 ἀπὸ δὲ Μειλήτου καὶ τῆς ἄλλης[ς 'I-]
 ωνίας μόνος καὶ (π)ρώτος, ἀρχιερε[ὺς]
 τοῦ Σ<ι>εβασ[τοῦ(?) γατων.
 - - - - -

We cannot identify the subject of this inscription, but clearly it belongs to the large group of statue-bases in honour of prominent officials and benefactors of Miletus, many of which were erected by, or in honour of, holders of the office of *προφήτης*. This was an annual post, usually filled by lot, though, owing to the expenses which it involved, candidates were not always forthcoming.¹

L. 1. It is not uncommon for mention to be made of the public posts held, and services rendered, by the father—or even ancestors—of the dedicator, or recipient, as the case might be, of these statues; e.g. *προφητῶν καὶ ἀρχιπρυτανίδων ἔκγονος*, *O.G.I.* 494, l. 4.²

L. 2. Epigraphical evidence exists in plenty for the gymnasia at Miletus,³ and the three mentioned here can hardly be other than those of the *νέοι*, the *πατέρες* and the *πολιται*. Owing to the scattered nature of the publications, and to the various ways of referring to the tenure of the gymnasiarchy, it seems worth while to set out in tabular form the examples

¹ Cf. Haussoullier, *Études sur l'Histoire de Milet et du Didymeion*, pp. 200 ff., and inscriptions cited in his *Index*, p. 316, s.v. *O.G.I.* 494, note 4, gives examples of years when (a) there was no *προφήτης*, (b) there was only one candidate, who was elected *ἀκληρωτέι*.

² Cf. also *Rev. Phil.* xxi. p. 42, No. 17; xxiii. pp. 313 f., No. 31.

³ See Oehler's article *Gymnasiarchos* in Pauly-Wissowa, from which many of the references tabulated here are taken; one or two of his citations are, however, incorrect as regards Miletus, but in general it is a most valuable collection of the evidence. For a summary treatment of the post, in the province of Asia, see Chapot, *Province d'Asie*, pp. 277 ff.

known to me, for they will shew that it was not uncommon for a man to be simultaneously in charge of all three gymnasia.

- (1), (2) γυμνασιάρχων πάντων τῶν γυμνασίων· γυμνασιάρχος δὲ. *C.I.G.* 2885, l. 13; *B.M. Inscr.* iv. 922, l. 5 f.
 (3) γυμνασιαρχήσαντα πάντων πρώτον· *Rev. Phil.* xxiii. p. 148 = Haus-soullier, *op. cit.* p. 264 f.
 (4) τετελεκώς δὲ καὶ χορηγίας καὶ γυμνασιαρχίας πάσας· *O.G.I.* 494, l. 20 f.
 (5) γυμνασιάρχων τῶν νέων, γ. τῶν πατέρων, γ. τῶν πολιτῶν (a woman). *Milet*, I. 7, p. 336, No. 265.
 (6) γυμνασιάρχος πατέρων καὶ γ. νέων καὶ γ. πολιτῶν· *Rev. Phil.* xxi. p. 42, No. 17.
 (7) γυμνασιαρχήσας τῶν τριῶν γυμνασίων· Haussoullier, *Mélanges H. Weil*, p. 148.

Contrast with these :—

- (8) τοὺς γυμνασιάρχους τῶν νέων (only). *Milet*, I. 7, p. 292, No. 203a, l. 10.
 (9) ποιήσας δὲ καὶ γυμνασιαρχίας τῶν πατέρων· *J.H.S.* vi. p. 353, No. 105 (copied at Jeronta by C. R. Cockerell in 1812).
 (10) γεγυμνασιαρχηκώς τῶν πατέρων τετράμηνον· *Rev. Phil.* xxi. p. 44, No. 19.
 (11) γυμνασιάρχος πατέρων· *C.I.G.* 2880, l. 7 f. = *Rev. Phil.* xxiii. p. 314, No. 31 bis.
 (12) γυμνασιαρχήσας νέων, γ. τῶν πατέρων (the same man as No. 7). *Rev. Phil.* xxi. p. 42, No. 16.
 (13) γυμνασιάρχος νέων, πατέρων· *Rev. Phil.* xx. p. 99 f., No. 4.
 (14) γυμνασιάρχος γερονσίας· *Rev. Phil.* xxiii. p. 318, No. 34.

The discovery of No. 6 enabled the three gymnasia to be rightly named, for it was previously unknown that the third was τῶν πολιτῶν; but it is not clear why Ziebarth, *Aus dem Gr. Schulwesen*², p. 28, states it to be τῶν ἐφήβων. In Hellenistic times, at any rate, it seems that νέοι and ἐφηβοί had a gymnasium in common. The Gymnasiarch of the Gerousia in No. 14 is not found in any other Milesian inscription; can it be an unusual way of referring to the γυμνασιάρχος πατέρων?

It is not surprising that many Gymnasiarchs had also been holders of the office of Paidonomos; several of those in this list, including the woman referred to in No. 5, give us this information in addition, and other *παιδονόμοι* may be found in *Milet*, I. 7, Nos. 204*b*, l. 2 and 258 (restored). We know something of their functions from the important Eudemos-inscription (*S.I.G.*³ 577), discussed also by Ziebarth (*op. cit.*, pp. 1 ff., lines 26, 34, 41, 56, 58, 69, 75, 78); a *παιδονομικός νόμος* is referred to in lines 54 and 80. We find them, naturally, in many other cities, but need not dwell on their functions.

Ll. 4-6. For another instance of generosity on the part of a Milesian official in time of want we may compare - - *ὑπὲρ τοῦ - - ποιῆσαι* *ἐ[ῡ]ωνι[σ]μοὺς σείτου καὶ ἐλαίου καὶ τῶν [λ]οι[π]ῶν ἐπιτηδείων ἐν [δυ]σχ(ε)[ρέ]σι καιροῖς*, in No. 9 of the inscriptions tabulated above, ll. 3 ff. For parallel instances from various parts of the Greek world, mostly under the Roman Empire, see *B.S.A.* xxvii. p. 233 *à propos* of an inscription from the theatre at Sparta. Other examples of *παράπρασιν* and kindred words are referred to there also. The restoration *[ἐπι]δόσ<σ>εις* is permitted by the space available, and gives us a more likely noun for the context.¹

L. 6. Gell has presumably omitted some letters from the first word, which is more likely to have been *ποι(ησα)μένου* than *ποι(ου)μένου*.

Ll. 6-12. Though the text is incomplete below, we gather that the subject of the inscription possessed the *latus clavus* of the Roman Senator; that he was only the fifth citizen from the whole province of Asia to enter the Senate; and that he was the first and only man from Miletus and the rest of Ionia to do so; and finally that he was the holder of some high-priesthood.

The phrase *πλατύσημος δῆμον Ῥωμαίων* seems a most unusual variant for the normal *συγκλητικός*, and must, of course, be distinguished from the title *χιλίαρχος πλατύσημος* (= *tribunus laticlavus*), which is not rare.² The incomplete phrase at the end of l. 8 must be restored as *ἐκ τοῦ αἰῶνος*, an alternative for the commoner *ἀπ' αἰῶνος*; we may also compare *ἐξ αἰῶνος* in *O.G.I.* 669, l. 61. The phrase is not rare, in one or other form, in combination with *πρῶτος*.³

¹ This improvement I owe to Sir William Ramsay.

² *E.g.*, *I.G.R.* iii. 667 (Patara), 763 (Phaselis, Lyciae); iv. 124 (Apollonia, Mysiae); Dessau, *I.L.S.* 8830 (Ephesus); *I.G.* v. 1, 533 (Sparta).

³ Cf. *πρώτη καὶ μόνη ἐκ τοῦ παντὸς αἰῶνος*, Dion. Hal. i. 3; *πρῶτος ἐξ αἰῶνος* at Termessus, Lanckoronski, *Städte Pisidiens*, p. 198, No. 13; *πρῶτον τῶν ἀπ' αἰῶνος*, *I.G.* iii. 805 (= *S.I.G.*³, 790). I am indebted to Professor Adolf Wilhelm for these and other references for this phrase.

The claim to distinction as being the fifth Senator supplied by the province of Asia suggests that the subject of this inscription lived at a fairly early period in the Imperial age, though we cannot date him exactly.¹ Nor can we supply the names of the four earlier holders of this honour. In any case it was a much rarer event for a man to enter the Senate from one of the Eastern provinces than for a Spaniard or a Gaul. The pertinent evidence is collected by B. Stech in his monograph on the Senate from Vespasian to Trajan (*Senatores Romani qui fuerint inde a Vespasiano usque ad Traiani exitum*, esp. p. 171 f.), though subsequent additions must not be overlooked. Among interesting parallels we may profitably note the inscriptions relating to the family of the Caristanii from Antioch in Pisidia, belonging to the province of Galatia, discussed by Cheesman, in *J.R.S.* iii. (1913), pp. 253 ff. The accession to the Senate of the first member of the family, C. Caristanius Fronto, is attributed to the reign of Vespasian (*op. cit.* p. 261); but their origin seems to have been Italian, an ancestor having been one of the original colonists in the reign of Augustus. For a Senator from Lycia, who boasts that he is the first of his family to attain that distinction, cf. [τοῦ γένους] πρῶτος συνκλητικὸς [γενόμενος τοῦ δῆ]μου Ῥωμαίων, *I.G.R.* iii. 615, Dessau, *I.L.S.* 8821). The first Egyptian to enter the Senate, according to Dio, was Coiranus, who was earlier accused of plotting with Plautianus against Septimius Severus.² Not until the second century was there any considerable number of Senators drawn from the Eastern Provinces, but then, and later with the increasing frequency of the practice, it was still usual to refer to this distinction as held by members of one's family, whether or no the person forming the subject of the inscription was himself a Senator.³

The last line is obscure and, as it stands, unintelligible. A slight correction, suggested in my transcript, gives a reasonable reading, ἀρχιερεὺς τοῦ Σ<ι>εβασ[τοῦ, which would imply the loss of at most eight

¹ Sir William Ramsay writes: 'I should say that the inscription is not later than the first century, before the Latin technical terms had received fixed Greek renderings.' I cannot, however, follow him in interpreting πλατύσημος as meaning 'the higher equestrian order as instituted by Augustus.' Ll. 6-9 surely refer to one and the same promotion, not to two stages of advancement.

² Dio Cassius, lxxvii. 5 (Loeb Library = lxxvi. 5 ed. Dindorf); but Stech, *op. cit.* p. 174, claims this distinction for Ti. Julius Alexander.

³ E.g. πατέρα καὶ π[άππον συνκλη]τικῶν, *I.G.R.* iii. 205 (Ancyra); other good examples are *I.G.R.* iv. 858, 910, 990, 1150, 1544. For a full discussion of this topic see A. Stein, *Der römische Ritterstand*, pp. 294 ff.

letters before the *χατων* at the end of the line. Could this be completed [*καὶ θειο*]τάτων | [*προγόνων αὐτοῦ*]? I see no simple alternative, but the omission of the expected τῶν is a distinct objection.

10. 'On a pedestal at Jeronta, Didymae': (inscribed on two sides)

(a) ΟΠΠΟΤΕΙΟΙΡΟCΑΝΑΣΝΥΜΦΩΝΕΠΟΧΟΥ
 ΗΕΝΟΙΟΟΙΔΑΝΑ
 ΚΑΙΖΑΘΕΗCΓΑΙΗCΕΠΙΕΙΙΝΟCΕΥΡΕ
 ΑΦΙΩΙΑ
 ΔΗΜΟΝΑΠΑΝΤΟΙΟΝΙΕΡΕΩΝΜΕΛΕΟΧ
 CΑΝΑ ΕΗΝ
 ΗΥCΕΝΔΕΙ'
 ΤCΙΕΝΑ ΟΜΦΔΑΙ
 ΑΙΕ
 ΝCΑΙΟΓΡ Α ΤΕΟΡΤΟΙ
 ΔΕCCEΤΟΡCΓΑC

"Οπποτε (Φ)οῖ(β)ος ἄνα(ξ) Νυμφῶν ἐποχού-
 (μ)ενο(ς) <ο> οἰδ(μ)α
 καὶ ζαθέης γαίης ἐπιεί(μ)ε)νος εὐρέ-
 α (ν)ῶ(τ)α

(5) δῆμονα παντοίων (μ)ερέων με(δ)έο(ν)-
 σαν (A)[νάγ](κ)ην

- - - - -

(The last five lines are beyond hope of recovery.)

(b) 'On the other side of same pedestal.'

ΙΡΕΥCΦΟΙΒΟΥΒΑΕΙCΦCΒΑC	'Ιρεὺς ὁ Φοίβου Βά(σσ)ος ὁς Βάσ-
ΙΟΥΦΥΗ	(σ)ου φύη
ΤΙΜΗCΑΝΑΓΚΕΝΤΗΔΕΡΗ	'τίμησ' Ἀνάγκ(η)ν τῇδε ῥή[σει]
ΘΕCΜΕ ΟΝ	θέσ(κ)ε[λ]ον(?)

Gell's copy enables the first three lines of (a) to be recovered—with some difficulty—but the remainder of the poem is hopeless.¹ L. 7 of his

¹ Professor Adolf Wilhelm has most kindly come to my help, and to him I owe most of the emendations in Gell's copy, which lead to the understanding, as far as it goes, of this inscription, as well as parallels for *εὐρέα νῶτα* and many other valuable suggestions.

version may be merely an alternative version of l. 8, though the variants in the first three letters are striking; as it forms an exception to the general setting-out of the poem, with the end of each hexameter inserted about seven spaces to the right of the line on which each verse begins, this explanation may be correct.

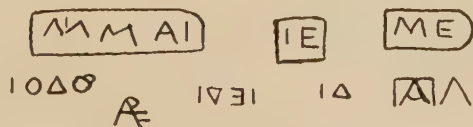
The construction remains obscure, and presumably a main verb is lost somewhere in the last two hexameters, which would enable us to see the connection between *Φοῖβος* and *Ἀνάγκη*; the latter restoration is made certain by the contents of side (b). No doubt the presence of ligatures, and apparently the injured surface of the stone, account for some of the inaccuracies of the copy; but the whole production, though free from metrical faults in the portions which are intelligible, shews signs of being a late composition, which accounts for the word *δαίμονα* in l. 3 appearing as *δήμονα*.

In l. 2 we may note the phrase *γαίης εὐρέα νῶτα*, which has a reminiscence alike of *εὐρέα νῶτα θαλάσσης* and of the Pindaric *νῶτων ὑπερ γαίης ἐρήμων*, *Pyth.* iv. 26, though the participle *ἐπιείμενος*, 'clad in,' seems to go but strangely with the rest of the line. In l. 3 the restoration (*μ*)*ερέων* presupposes that the *μ* was ligatured to the preceding *Ν*, and the other changes are not violent.

Lines 4 and 5, assuming that the stone contained five hexameters only, are beyond healing, though *ΟΜΦΔΑΙ* - - | *ΑΙΕ* suggests *ὀμφ(άλ)ι[ος] | αἰε[τός]* as not too wild a conjecture.

In side (b) the name is the only difficulty in l. 1, and I owe to Professor Wilhelm the suggestion *Βά(σσο)ς*, as *Βαειος* can hardly be right. *Βά(στ)ος* is even nearer the reading of the stone, and is a known name.¹ 'Bassus (or Bastus) son of B., priest of Phoebus, honoured divine Necessity with this saying,' *i.e.* with the poem on side (a). *ρή[σει]* seems certain for the noun, and the emendation *θέσ(κ)ε[λ]ον* seems the simplest solution for the final word, though, as an epithet of *Ἀνάγκη*, it is hitherto unknown.

11. *Ibid.*, 'on stones of the Temple Didymaeus.'



¹ Cf. *B.S.A.* xviii. p. 140, l. 1; but only, it seems, as a Macedonian name.

Eight of the various inscriptions carved on the building-stones of the temple. As he points out in his Diary, Gell thought these not to be the names of workmen but perhaps those of people who gave the stones.

For further reference to these marks, see *Antiquities of Ionia*, I². p. 49; Haussoullier, *Études sur l'Histoire de Milet, etc.*, p. 52 f.

12. 'On the back of a statue on the sacred way, Jeronta, only deeply scratched.'

ΜΙΛΙΤΟΙ Μ	Μιλιτοι μ
ΜΙΛΥ . . .	Μιλυ . . .
Ν Μ Ο Ν Υ Ι Λ	Ν μ ο ν υ ι λ (?)

Possibly l. 2 is an alternative version of l. 1. I hesitate to restore l. 1 as *Μιλ(ή)τοι μ*, as we should expect *omega* as the sixth letter, and I can make nothing of l. 3. This inscription seems not to have been seen or copied by any other traveller. It is, however, just conceivable that it represents a hasty and incomplete copy of the inscription seen by Lord Aberdeen on the leg of a statue near the Sacred Way,¹ though we must admit that the resemblance to his copy is not very convincing.

13. 'At Cos very hastily copied, published before.'

= Paton-Hicks, *Inscr. of Cos*, p. 135, No. 102 = *I.G.R.* iv. 1057.

G.'s copy exhibits one or two unimportant errors and omissions.

14. 'At Cnidus near a statue.'

= Newton, *Halicarnassus, etc.*, II. p. 719, No. 27 = *B.M. Inscr.* IV. 815.

G. reads	ΞΣΤΙΣΔΑ	suggesting	γετις	as the ending of
	ΝΑΚΑΙΠΑΙC		the first name.	

15. Cos (?). G. does not give finding-place.

ΟΓΥΙ ΣΟΥΙ' ΣΤΟΣΕΥΣΕ	οπυ . . σουκ . στος ευσε[βης]?
ΘΑΝΩΕΝΕ ΕΤΟΥΔΕΣΙ	θανώ[ν] ενε . ε τουδε σή[ματος]
ΠΑΤΡΟΣΔΙΟΦΑΝΤΟΥΠΑΝ	πατρός Διοφάντου παν - -

Possibly from an epitaph in iambic metre.

16. 'At Budrun Beys gate.'

= *C.I.G.* 2657.

G. copied the patronymic in l. 3 as ΝΙΧΟΜΑΧΟΥ.

¹ Walpole, *Memoirs*, p. 458, ix., = *C.I.G.* 2861; Roehl, *I.G.A.* 487.

17. Cnidus.

= Hamilton, *Researches in Asia Minor*, II. Appendix V, No. 296

18. Cnidus.

= *Id.*, *op. cit.*, No. 295.

19. 'At Cnidus. square base of pedestal.'

ΑΡΙΣΤΟΒΟΥΛΟΥΤΟΥ
ΕΥΜΕΝΕΥΣ

Ἀριστοβούλου τοῦ
Εὐμένεως.

20. 'At Cnidus tombs a mile E.'

ΟΥΔΑΛΙΟΙΑ
ΗΡΩΟΣ

- - -
ἥρωος.

I have no suggestion for l. 1, which is mutilated at each end.

21. *Ibid.*

ΟΔΑΛΛΟC
ΓΑΙΟΝΚΟΤΙΟΝΠΑC
ΗΡΩ

ὁ δᾶμος
Γάϊον Κότιον Πασ - -
ἥρω[α].

22. Cos. G. does not give finding-place.

= Paton-Hicks, *Inscr. of Cos*, p. 147, No. 119 = *I.G.R.* iv. 1062.

G.'s copy is less good than the published version.

23. 'At Halicarnassus.'

= *C.I.G.* 2666.

G.'s copy shews the correct text to be

ΜΝΑΣΕΑ
ΕΥΝΙΚΗ
ΧΡΗΣΤΗ
ΧΑΙΡΕ.

A. M. WOODWARD.

EXCAVATIONS AT HALIARTOS, 1926.

PART II.

IN the last volume of the *Annual* a report was given on the work done at Haliartos in 1926. It was not possible at that time to publish the excavation exhaustively as the finds had not been thoroughly examined, but I have recently¹ made a further study of them, and have prepared this supplementary paper to bring the publication up to date. The finds are here catalogued and discussed under their several sections, and the conclusions derived from them are set out in the summary at the end.

ARCHITECTURAL FRAGMENTS.

The finding of a portion of a *poros* column-drum and *poros* mutule fragments in the sanctuary area was mentioned in the earlier article. Numbers of mutule fragments were found, but they were much broken up. If the mutules were of the normal type with eighteen guttae, their dimensions were approximately .44 m. $\times$.25 m. Another architectural fragment dug up within the precincts was a portion of a limestone architrave block. The only piece of marble which appeared at all in the excavation was a part of a small column-drum, found outside the west wall of the rectangular building. Its diameter was reckoned to have been about .40 m., *i.e.* it was much smaller than the *poros* column-drum (diam. *c.* .70 m.), and it can scarcely be regarded as evidence that the *poros* façade of the sanctuary was replaced by a marble structure.

¹ Easter 1928. I should have stated in the previous article that the work was originally carried out with funds from a Travelling Studentship of London University. My journey to Greece this year for the purpose of preparing this paper was facilitated by a grant from the Research Committee of Birmingham University. I must record my indebtedness to the Director of the British School for advice and assistance throughout, to Professor P. N. Ure for criticism of the section on Pottery, and to Mr. Karouzos, Ephor of Boeotia, for the hospitality of his house at Thebes while I was making my notes on the finds.

Quantities of roof-tiles, painted a gay red, appeared in the immediate neighbourhood of the sanctuary.

In the earlier article it was stated that the pieces of terracotta revetment found in excavating the sanctuary were too much damaged to give any evidence for the date and architectural style of the building. This proves to be incorrect: there are two fragments with recognisable painted decoration, one a part of a lateral sima, the other of a raking cornice.

(a) Lateral sima, with single guilloche, the bands cream, with incised outline, on a red ground: ht. .07 m. A similar fragment from Mycenae is attributed to the sixth century in Van Buren, *Greek Fictile Revetments*, p. 104, No. 30.

(b) Raking cornice; the decoration was apparently similar to Van Buren, *Greek Fictile Revetments*, Pl. XXVI. Fig. 90 (from Delphi: attributed to VI-V century), though the shape is more like that of *ibid.*, Fig. 91. The only surviving design is a small part of the cream astragalos on the abacus: ht. .11 m.; length of fragment .20 m.

POTTERY.

Mycenaean.—Only a few isolated sherds were found in the wall-excavations, but to the east of the sanctuary, within the περίβολος, there was discovered a Mycenaean area, from which a quantity of pottery was obtained. The most important sherds were some fragments from the upper part of a painted goblet (or bowl?) probably about .16 m. in diameter, of a cream-coloured clay, with decoration in black, consisting of a broad band around the rim, with spiral pattern below it and two broad bands encircling the swelling body of the vase; one surviving small vertical handle, painted black. Much coarse red unpainted ware was found, including the greater part of a large goblet, .20 m. in diam. at the rim: stem and foot missing: rather similar to the unpainted goblets found at the Kadmeion at Thebes, but these are of greyish-brown ware.

Geometric.—The Geometric period is very poorly represented at Haliartos up to the present; a few sherds of uncertain date and origin were found both in the wall-excavation and in the sanctuary area. The only significant find belonging to the period is the figurine fragment which is described below, pp. 132 f.

Orientalising Period.—Several interesting sherds of this period were

found in the sanctuary area; one is a fragment of a large vase of light green clay with decoration in dark brown, and liberal use of incision; on it appears the head of a panther, facing, and two fill-ornaments; the execution is careless, and the vase was probably a local imitation of sixth-century Corinthian style.

Another more important sherd is that here illustrated (Fig. 1) and referred to in the previous article as conjectured to be an Ionian importation (*B.S.A.* xxvii. p. 90). It was found in the angle of the *περίβολος* close to the steps (see Plan, *ibid.*, p. 87). The description is as follows: light pinkish clay, covered on the outside with a creamy slip; decoration in dull black, with red and white; in the centre, diamond

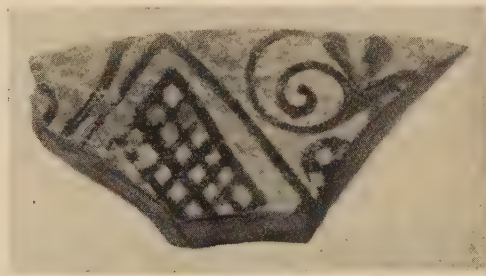


FIG. 1.—SHERD FROM AN ORIENTALISING VASE.
(Scale *ca.* 3 : 4.)

hatching in black; on the right, palmette with small spiral, the leaves of the palmette alternately black and red; below it an object in black with traces of red and white; on the left, part of similar palmette and spiral; interior, a thin red circle around the top of the rim, a narrow reserved circle below it, then a broad band covering almost the whole depth of the sherd.

The three units in the decoration of this sherd, namely, hatching, palmette in close association with spiral, are all found in equally close association, though with different relative values, in the Orientalising style named by Pfuhl 'delisch-melisch' (*Malerei*, iii. p. 23, Fig. 105). But the shape of the sherd excludes the possibility that it is from a vase of that type. The fact that the decoration is polychrome seems to indicate that this sherd may have come from a vase (possibly a kantharos) of Boeotian fabric similar to that illustrated in Boehlau's article, *Jahrbuch*

iii, 1888, p. 339, Fig. 15.¹ But it has evident kinship with Eastern Greek wares. If it is Boeotian,² its period should be the first half of the sixth century.

Black-figure and Red-figure Periods.—Very few significant sherds of black-figure pottery were found anywhere in the excavation; some small fragments of floral black-figure occurred here and there. The sanctuary area produced great quantities of black glaze ware, of all qualities from the finest to the coarsest. Very common were portions of vase-bottoms with stamped decoration inside, generally double or treble circles of short lines, arranged in concentric fashion, surrounding a group of stamped palmettes.³ A form of exterior decoration found on several black glaze sherds was a wreath of small ivy-leaves in white paint, sometimes with the stems incised.

It was mentioned in the earlier article (p. 84) that a deposit of black glaze pottery was found outside the tower in the fourth wall-system. This deposit is for the most part of moderately good, plain black ware. It contains a number of sherds from small cups with shallow fluting on the outside, in some horizontal, in some vertical. One sherd with horizontal fluting has a vertical spurred handle. Both are common Boeotian types and both occur at Rhitsona in one grave (No. 34) of which the date is stated to be the second half of the fourth century.⁴ Much of the black glaze in this deposit has an unusual silvery gleam, presumably due to the firing, and among this silvery ware is a series of sherds which seems to come from small cups of the size and shape of a large egg-cup with low, solid, stemless foot. They are about 6 cms. high, about 5.5 cms. in diameter, and are roughly covered with black as to their upper two-thirds, and left plain below. There are many fragments of such vases in this deposit, some almost whole, and none apparently has a handle attached. Their diameter is a little large for the normal egg-cup, but they may have had that use. At any rate they seem to have served some common everyday purpose (Fig. 2).

¹ Another is illustrated in Baur, *Stoddard Collection*, p. 70, Fig. 16, No. 178.

² The suggestion that the sherd came from a Boeotian vase of the type named was made in 1926 by Professor Ure, to whom I sent a drawing. More recently, after comparing it with other examples of the type, he is of opinion that very possibly it is Boeotian. Mr. Payne takes the same view. However, no exact parallel can be cited.

³ For illustration of similar stamped ware, see Ure, *Black Glaze Pottery from Rhitsona*, Plate XIII. No. 59, 16.

⁴ *Ibid.*, p. 29.

Red-figure pottery was rare. The most important sherds, which came from outside the rectangular building, were four pieces of the foot of a large krater (?) of fine red ware, probably of Attic manufacture.



FIG. 2.—CUP OF SILVERY
BLACK GLAZE WARE.



FIG. 3.—SECTION OF PART OF
FOOT OF LARGE R.F. VASE.

The outside is black, with red circles; the inside unpainted. The clay is from 1 to 2 cms. thick (Fig. 3). On another red-figure sherd—prob-

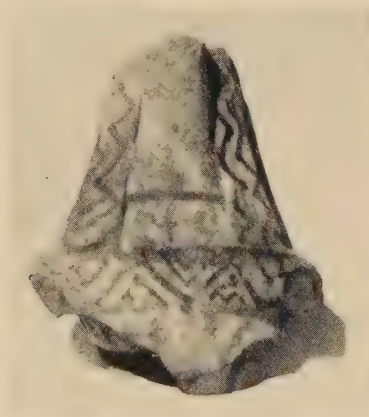


FIG. 4.—GEOMETRIC FIGURINE.

bly from a krater—also found in the precincts of the sanctuary, appears the head of a youth with some object behind him partly done in white. It looks like late Boeotian work.

TERRACOTTA OBJECTS.

Geometric Figurine (Fig. 4). Found in a trial trench outside the west Acropolis wall; at the particular point where it was found, the

little that remains of the wall belongs to the Mycenaean system, but probably formed the substructure of the Early Hellenic line of fortification also.

The figurine is of a light reddish-brown clay, and has a creamy white slip all over; the decoration is in black with three horizontal purple bands; the back is unpainted. The two side-pieces on which the hair is represented were not made in one with the neck, but attached separately, and the neck and its attached pieces are still further united by a flat strip laid down the back. The zigzag treatment of the hair is unusual, but is found in another example which is in the Museum at Eleusis.



FIG. 5.—TERRACOTTA HEAD.

This figurine clearly belongs to the Geometric 'Tanagraeische Gattung' illustrated in Winter, *Die Antiken Terrakotten*, III₁, p. 5.

Terracotta Head (Fig. 5). Found in the surface trench outside the περίβολος at about the centre of the north side. It is an exceptionally good head and well preserved. The nose is mutilated, and one half of an applied piece which passed over the crown of the head to represent a braid of hair has become detached and lost. The hair is parted down the middle and is caught up in a knot at the back; the details are inserted with the point of a knife or stylus. The features have much delicacy, but the under-chin is fleshy and the back of the neck is treated in summary roundness. The style is almost good enough to be compared with fourth-century Attic work.

The lower part of the neck has a depressed ridge, from which it tapers away slightly, evidently for insertion into a socket. Another example of a head with this peculiarity is illustrated in the Berlin Antiquarium publication *Ausgewählte Griechische Terrakotten*, Pl. IV., left, where the text (p. 9) says, 'das Köpfchen war zum Einlassen in eine Figur bestimmt.' But I think it is scarcely to be regarded as certain that this head, or every head like it, was ever part of a complete figurine. There is some evidence that such heads may have been made as separate dedications and fitted into small bases of some kind, possibly of wood, in the same manner as the portrait heads of modern sculpture. Terracotta figurines are commonly made in one piece, there being no such reason for making head in one piece and body in another, as, for example, the reason why the Demeter of Knidos is so made. I have been informed by Professor Pappadakis that he once found a head similar to the Haliartos head in a tomb, and that there was no trace of a body or other attachment. In a tomb one would expect to find the attachment, whatever it was, unless it were made of some perishable material such as wood.¹

INSCRIPTIONS.

The inscriptions are derived from ruined buildings in the neighbourhood, except one small fragment, No. 8, which was found on the site itself. They are mainly names on tombstones, but there are two stelai, Nos. 10 and 11, which were set up at Haliartos to mark Athenian territory after the land had been handed over to Athens by the Romans.

I have tried to arrange them in approximate chronological order; the first two grave stelai belong probably to the first half of the fifth century; Nos. 3-8 may all be fourth-century stones; No. 9 perhaps third century; Nos. 10 and 11 subsequent to 169 B.C.; No. 12 uncertain.

(1) Rectangular grave stele of local limestone, formerly built into wall of ruined building on side of hill, east of Copais Compound; neat shallow lettering.

H. .56; br. .51; th. .40. Letters .043.

ARISTON

Both this name and the next are among the commonest in Boeotia.

¹ [In this connection I venture to cite a suggestion made to me by Professor A. D. Keramopoulos, of the University of Athens, *à propos* of an archaic terracotta head from Sparta with a cylindrical projection below, that such heads may have been inserted into bodies made of wax and dressed in 'doll's clothes.'—A. M. W.]

(2) Similar stele from same place, mutilated; thin worn lettering of similar cut to No. 1.

H. .65; br. .52; th. .33. Letters .03-.04.

||| ΑΘΙΣΟΠΟΤΟΤ ||| [K]αφισόδορο[s].

(3) Large plain rectangular stele of local limestone, lying on its back in a building which is perhaps the ruined mosque referred to by Leake, *Travels in Northern Greece*, ii. 207; it is to the west of the Copais Compound, not far from the left bank of the river. The stone is much worn and very difficult to read.

H. .90; br. .66; th. .45. Letters .02 to .025.

ΡΟΜΑΘ	ΑΛΙΣ	[Δ]ρομαθάλις (?)
ΥΦΑΡΙΑ		[Ε]ύφαρία
ΒΟΥΝΕΙΝΙΣ		Βουνείνις
ΦΘΟΥΝΟΣ		Φθοῦνος
ΘΕΟΔΩΡΟΣ		Θεόδωρος

Θεόδωρος is frequent enough in Boeotia, but the other names are an extraordinary collection and none of them occurs in the *Corpus*. For [Ε]ύφαρία, however, compare 'Αρχ. Δελτ. viii. pp. 218 ff., No. ιγ' (13), line 67, and p. 222, *Ευφάριος*.

In l. 4 the υ of Φθοῦνος was apparently left out by the graver at first and put in as an afterthought. This suggests that the stone may belong to the period (in Athens about the middle of the fourth century) when ο was ceasing to be used to represent ου.

(4) Grave stele of local limestone, built into apse of ruined church, situated in a field east of Copais Compound; the stele had a moulding at top and bottom; the top was partly cut away when the stone was re-used.

H. .98; br. .57; th. .52. Letters .03. Free ends of letters slightly splayed.

ΚΑΛΛΙΣ

Several other examples of the name occur in Boeotia. See also No. 9.

(5) Similar stele from same ruined church, built into wall at floor level.

H. 1.05; br. .68; th. .47. Letters .035-.045. Wide shallow lettering; free ends splayed.

ΠΟΔΑΡΕΥΣ

This name is either new or very uncommon.



FIG. 6.—GRAVE STELE FROM RUINED BUILDING.
(Inscription No. 6.)

(6) Ornamented grave stele from same place; moulding at bottom and remains of moulded top; below the name a flowering lotus and wreath in relief (Fig. 6).

H. 1.05; br. .59; th. .42. Letters .035.

ΚΑΦΙΣΟΔΩΡ } *Καφισόδωρ[ος]*

(7) Fragment of grave stele lying outside same ruined church; upper part with inscription and moulded top surviving; lettering rougher than the others.

H. .45; br. of shaft .44; th. .40. Letters .03-.04.

$\left. \begin{array}{l} \{ \\ \{ \end{array} \right\}$ ΕΝΑΝΔΡΟΣ
 ΓΓ Ω *Ξένανδρος*
· γ γ · · · ω - -

(8) Fragment of limestone stele found in excavating the sanctuary; mutilated all sides.

H. .23; br. .19; th. .12. Letters .0225.

ΙΤΑ
ΣΤΙΣ
ΑΡΕ

(9) Well-preserved grave stele of local limestone, from same place as No. 1 but built into wall; carefully cut moulding on top.

H. of exposed portion .49; br. .51, top; .47, shaft; th. .36, top; .34, shaft. Letters .025. Neat lettering, all free ends sunk and splayed, not real apices.


 ΚΡΑΤΥΛΙΣ
 ΚΑΛΛΙΣ

(10) Rectangular limestone stele from same place.

H. .54; br. .43; th. .29. Letters, top line, .05; second line, .04. Large deeply-cut lettering.

ΑΓΡΟΣ
ΑΘΗΝΑΙΩΝ

See note on No. 11.

(11) Limestone stele from same place; mutilated at top.

H. .85; br. .34; th. .27. Letters .085. Deep heavy lettering, roughly cut.



A[Γ] ΑΘ, *i.e.* Ἀγρὸς Ἀθηναίων. This stone and the preceding one were set up at Haliartos to mark the territory which was handed over to the Athenians at their request after the Romans had sacked the city in 171 B.C. Polybius (xxx. 18a) has a note on this event: ἐκ δὲ τῆς τῶν Ἀλιαρτίων χώρας ὄνειδος αὐτοῖς (the Athenians) μᾶλλον ἢ καρπὸς τις συνεξηκολούθησεν. A similar stele, brought from Haliartos some years ago by Professor Pappadakis, is now in Thebes Museum.

(12) Large limestone post with rectangular shaft, now built horizontally into wall of same building; on rough surface in large deep letters.

H. of shaft .80; br. .36; th. .37. Letters .09.

DA

Mason's mark?

COINS.

The following coins, interesting mainly for their diversity of origin, were found in the area of the sanctuary and its associated buildings. Only one coin, and that so damaged as to be unrecognisable, was found in the excavation of the walls.

(1) Sanctuary, N.W., surface.

Leukas (?), bronze: *B.M. Coins, Thessaly*, etc., p. 177, No. 54 (?)

(2) Rectangular building, outside west wall; 1 metre.

Lokrian, bronze: *B.M. Coins, Central Greece*, p. 9, No. 80. (Date perhaps after 300 B.C.)

(3) *Ibidem.*

Boeotian, bronze: *B.M. Coins, Central Greece*, p. 38, No. 58. (Date c. 338-315 B.C.)

(4) Outside περίβολος, N., surface.

Boeotian, bronze: *B.M. Coins, Central Greece*, p. 41, No. 82. (Date c. 220-197 B.C.)

(5) *Ibidem.*

Chalkidian, bronze: *B.M. Coins, Central Greece*, p. 113, No. 78(?) (Date c. 369-336 B.C.)

(6)* Above *poros* wall between sanctuary and rectangular building.

Attic, bronze: *B.M. Coins, Attica*, p. 95; similar to No. 689 but no inscription visible on reverse. (Imperial; Hadrian and Antonine.)

(7) Between sanctuary and περίβολος, W., surface.

Roman Imperial, bronze: almost certainly Theodosius (A.D. 379-395). Size .55 in.

(8) Rectangular building, south wall.

Byzantine, bronze: much-battered coin of similar type to *Imperial Byz. Coins in B.M.*, ii. Pl. LVI. No. 13. (Date A.D. 976-1025.)

(9) *Ibidem.*

Frankish, silver: die similar to Schlumberger, *Numismatique de l'Orient Latin*, Pl. XII. No. 13. (Middle of thirteenth century.)

MISCELLANEOUS.

The miscellaneous finds, in addition to those named in the last article, include pieces of obsidian from every part of the site; loom-weights of clay, pear-shaped and pyramidal, and one of lead, pyramidal; stone pounders; a large celt (broken); a number of iron implements, including a small forceps; lead filling from a cramp-iron.

SUMMARY.

The study of the finds here detailed has not altered but confirmed the view set down previously, that Haliartos was occupied and inhabited continuously at least from Mycenaean times down to 171 B.C., the date of its sack by the Romans. There are no new facts to add to what has been published about its systems of fortification. With regard to the

sanctuary perhaps something more may be said, and in considering the evidence it will be worth while to recall for a moment the references to the sacred buildings of Haliartos contained in Pausanias. This writer mentions (ix. 33) one sepulchral monument, the *μνήμα* of Lysander; one shrine of a departed hero, the *ἡρώων* of Kekrops; one sanctuary, the *ἱερόν* of the Praxidikai; and several nameless temples (*ναοί*). The sanctuary of the Praxidikai was not in the city but *πρὸς τῷ ὄρει τῷ Τιλφουσίῳ*, so that it cannot be the one now excavated. Also our sanctuary was probably too considerable a building to be called a *ἡρώων*, and so presumably it was among those nameless temples which Pausanias saw in the city and of which he says: *ἐν Ἀλιάρτῳ δέ εἰσι ναοί, καὶ σφισιν οὐκ ἀγάλματα ἔνεστιν, οὐκ ὄροφος ἔπεστιν· οὐ μὲν οὐδὲ οἷς τις ἐποίηθησαν, οὐδὲ τοῦτο ἡδυνάμην πυνθέσθαι*. At present it is not possible to do other than re-echo the latter part of this assertion; there is up to now no indication of the name of the deity to whom this sanctuary was dedicated. Nor can any event in its history be yet pointed to with certainty; but the evidence of the finds now published is strongly in favour of its existence already before the end of the sixth century. If we assume that the sherd illustrated in Fig. 1 does indeed come from a Boeotian vase of the first half of the sixth century, it would not in itself be sufficient ground for giving the building such an early date. But there are, both among the architectural details and among the pottery, finds which demand a date not later than the second half of this century. As to the date of its ruin or disuse there is nothing fresh to say. The presence of fourth-century finds was previously noted, and the evidence has since been confirmed and amplified, so that it seems safe to suggest that the sanctuary survived at least until the Hellenistic period.

R. P. AUSTIN.

FURTHER NOTES ON THE GREEK ACROPHONIC NUMERALS.

IN an article on 'The Greek Numeral Notation' published in this *Annual*, xviii. 98 ff., I restricted myself to a discussion of those systems which compose the so-called 'acrophonic' group, promising for some future occasion an article dealing with the second, or 'alphabetic,' group of numeral systems. This promise has not been forgotten, though the greatness of the undertaking and the lack of adequate leisure have led to delay in its fulfilment; I have, however, collected considerable materials and hope before long to prepare them for publication. Meanwhile, the accession of fresh evidence relative to the acrophonic numerals, while it does not appear to me to invalidate my main conclusions, calls for the addition of a few notes to my previous article with a view of bringing it up to date and rendering it less incomplete.

Bibliography.—No fresh and fruitful discussion of the Greek numeral systems as such has appeared since the publication of my essay. W. Larfeld's *Griechische Epigraphik*³ (Munich, 1914), 290 ff., repeats without substantial alteration, and for the most part *verbatim*, the corresponding section of the same scholar's *Handbuch der griechischen Epigraphik* and must be used with great caution.¹ Two booklets in Teubner's 'Mathematisch-physikalische Bibliothek,' E. Löffler's *Ziffern und Ziffernsysteme*, I. *Die Zahlzeichen der alten Kulturvölker* (2nd edition, Leipzig, 1918), and E. Fetweiss' *Wie man einstens rechnete* (Leipzig, 1923), though admirably fulfilling their respective tasks, serve to popularise rather than to extend our knowledge of the Greek numeral systems and their employment in mathematical operations. Of greater scientific importance is A. Nagl's *Die Rechentafel der Alten*, in which the surviving examples of the

¹ Cf. A. Rehm, *Berl. phil. Woch.* xxxvi. 309; M. N. Tod, *Cl. Rev.* xxix. 88.

ancient *abacus* are subjected to a close examination and their use is investigated.*

Additional Evidence.—I pass now to a brief survey, in geographical order, of the fresh materials for this study which have come to my notice since my previous article was published. For convenience of reference, I give to each State represented the number which it bears in my earlier review. I have not thought it necessary to record in all cases the republication (*e.g.* in Ditt. *Syll.*³ or in Schwyzer, *Dial. Graec. exempla epigr.*) of inscriptions cited in my earlier article.

2A. CORINTH. *Am. Journ. Arch.* xxiii. 353 ff., No. 70, a stele of the early fifth century, threatening trespassers with a fine expressed in the phrase ζαρία |||||. The editor, K. K. Smith, discusses the two alternative interpretations, 8 drachmas and 8 obols, and decides, though not without hesitation, in favour of the latter; to me the former appears to be somewhat more probable. Cf. Schwyzer, *op. cit.* 126^a.

3. ARGOS. To the inscription cited in my article (p. 102) a third-century decree (*Mnemosyne*, xliv. 65) must now be added, if W. Vollgraff has correctly restored the phrase λαβόντες χχ δραχμάς.

6. NEMEA. The recent excavations have brought to light what appears to be a further fragment of *I.G.* iv. 481, with similar numeral signs. This will be published in a forthcoming work on the American excavations at Nemea: an admirable photograph of the fragment has meanwhile appeared in *Art and Archaeology*, xxii. 132. In l. 5 we find $\text{B}\odot\odot\odot\odot::\equiv--<<$, which gives us the new sign < denoting a fraction of an obol.

10. TEGEA. To the evidence cited from Tegea (*op. cit.* 105 f.) we may add a third-century fragment (*I.G.* v. 2. 33), which refers to some building and contains four times (ll. 5, 8, 10, 12) [γων?]αἶτοι: ||| and once (l. 14) [γων?]αἶτοι: ||, while elsewhere (l. 4) it has ΔΔ followed by *vestigia dubia* and (l. 7) $\text{B}\Delta\Delta\Delta\Delta\Gamma\xi$. If this last sign is correctly read, it would seem that a sum of money is here indicated; otherwise, all the numerals in this fragment will signify pure numbers.

11. MEGALOPOLIS. Le Bas-Foucart ii. 331 c is now *I.G.* v. 2. 441, and the unpublished inscription to which I referred is *I.G.* v. 2. 442 (cf. F. Hiller von Gaertringen, *Arch. Eph.* 1914, 135), a subscription-list con-

* *Sitzb. Ak. Wien*, clxxvii. 5. See also the same scholar's article *s.v.* Abacus in Pauly-Wissowa, Suppl. iii. 4 ff., supplementing Hultsch's treatment, *op. cit.* i. 5 ff.

taining the sums P (l. 4), Μ (l. 9), Τ (l. 11), ΛΛ (l. 22) and ΛΛ (l. 23). It seems best to interpret Τ as 300 (drachmas, or possibly staters) rather than as a talent, and so to bring it into line with the P (100). In that case all the numerals used in these two inscriptions belong to the alphabetic system.

11A. PHIGALEA. The inscription ΕΤΛΛΙΛΔ (*I.G.* v. 2. 424), in letter-forms not earlier than the fourth century, is transcribed by von Hiller as [π]ετάλια Δ (*folia decem*).

12. REMOUSTAPHA. The regulations of the Demeter-cult are republished in *I.G.* v. 1. 1498, where they are assigned to the second century B.C.

13. MESSENE. A. Wilhelm has discussed this text (*I.G.* v. 1. 1434) in *Jahresh.* xvii. 116 ff., assigning it with probability to the first century B.C. His interpretation of the numeral signs, which had been independently reached, agrees with mine.

14. ANDANIA. In an appendix to this article I discuss the text of *I.G.* v. 1. 1532. Here I confine myself to summarising the numeral system there employed, thus correcting and supplementing the table given in my earlier article (p. 107, Fig. 2):

Μ or $\hat{\Delta}$	= 10 minas;	Τ	= 3 obols;
Μ	= 1 mina;	Ι	= 1 obol;
Ξ	= 10 staters;	<	= $\frac{1}{2}$ „
Ε	= 5 „	>	= $\frac{1}{4}$ „
Σ	= 1 stater;	×	= 1 chalkus;
Δ	= 1 drachma;	Κ	= 1 kollybos.

16(d). OROPUS. In *’Αρχ. Έφ.* 1925-6 (issued 1928), 44 f., B. Leonardos publishes, with a useful bibliography, five *abaci* found by him in the course of his excavation of the sanctuary of Amphiaraus. One of these (No. 156) bears the Attic signs ΧΠΗΕΔΓΗΙΕΤΧ, which have their usual monetary values, while on a second (No. 157) occur the signs ΜΤΠΧΠΗΕΔΓ ---, where the insertion of Τ (1 talent = 6000 dr.) between Μ (10,000 dr.) and Π (5000 dr.) is noteworthy. The remaining three are uninscribed.

20. ORCHOMENUS. To the evidence adduced, *op. cit.* 110, I should have added two subscription-lists of about 250 B.C., *I.G.* vii. 3191-2, of which improved texts, based on Welcker's copies, have recently been given by E. Preuner in *Ath. Mitt.* xlix. 125 ff. In 3192 the amounts contributed are ||| || | (3, 2, 1 dr.): these recur in 3191 together with

Σ (l. 9) and Ο (l. 13), both of which Preuner (p. 129) regards as probably intended for Δ (10 dr.).

23. PHYSCUS. Schwyzer, *op. cit.* 370 (= *I.G.* ix. i. 350), l. 5, wrongly gives (ν +) Μ Μ Μ instead of (ε' +) Μ Μ Μ. The same mistake recurs in a Naupactian record, *op. cit.* 389 (= *I.G.* ix. i. 359), l. 7.

26. ACARNANIA. For Stratus I should also have cited a second-century manumission, *I.G.* ix. i. 447, which has in l. 6 τιμᾶς ἀργ(υρίου) Μ.

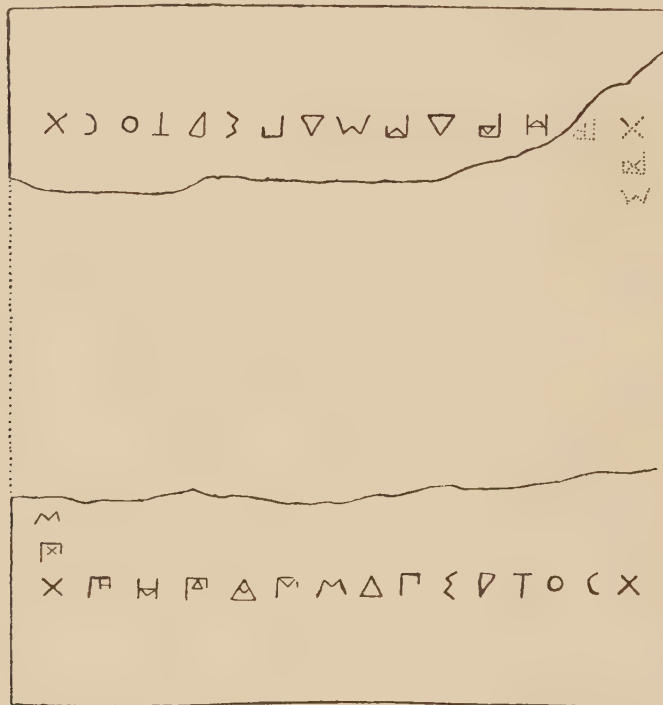


FIG. 1.—*ABACUS* FROM THYRRHEUM.

My interpretation of *I.G.* ix. i. 488 as part of an *abacus* had been anticipated by J. Woisin (*De notis numeralibus*, 4) and by A. Wilhelm (*A.-E.M.* xx. 91), and has since been independently put forward by A. Nagl (*Sitzb. Ak. Wien*, clxxvii. 5. 20) and by K. A. Rhomaïos (*Ἀρχ. Δελτίον*, ii. παρ. 48). Two portions of a similar *abacus* from Thyrrheum (*Ἅγιος Βασίλειος*), which was unfortunately deliberately broken by its discoverer to render it more portable, have been discussed by Rhomaïos (*loc. cit.*; cf. *Ἀρχ. Ἐφ.* 1912, 268), by whose kind permission I here reproduce (Fig. 1) his con-

jectural restoration of the stone. The signs engraved on it are the following :

Μ = 10,000 (minas);	Α = 10 minas;	▷ = 1 drachma;
Ϟ = 5000 (minas);	ϙ = 5 „	⊥ = $\frac{1}{2}$ „
Χ = 1000 (minas);	Μ = 1 mina;	○ = 1 obol;
Ϟ = 500 (minas);	Δ = 10 (staters);	Ϛ = $\frac{1}{2}$ „
⊥ = 100 minas;	Γ = 5 (staters);	Χ = 1 chalkus.
ϙ = 50 (minas);	Ξ = 1 stater;	

Rhomaïos interprets the ⊥ as τεταρτημόριον δραχμῆς = 2 ὀβολοί. But (a) $\frac{1}{4}$ drachma is $1\frac{1}{2}$ rather than 2 obols, (b) it would be curious to have a sign for $\frac{1}{4}$ dr. and none for $\frac{1}{2}$ dr., and (c) whenever ⊥ stands for τεταρτημόριον (as at Athens, Epidauros, Hermione, Tegea, etc.), it denotes not $\frac{1}{4}$ dr. but $\frac{1}{4}$ obol. I am confident, therefore, that here (as at Thespieae, Naxos and Chalcedon) it represents τριώβολον, i.e. $\frac{1}{2}$ drachma.

28. COROPE. Ditt. Syll.³ 1157 gives δραχμὰς [ϙ] in ll. 29, 83.

29. EUBOEAE. The Carystian loan-record has been republished in *I.G.* xii. 9. 7, with a note by B. Keil on the numerals, and the catalogue from the same place in *I.G.* xii. 9. 8 (= Ditt. Syll.³ 951), where it is assigned to the second century: the Eretrian *lex de technitis conducendis* is now *I.G.* xii. 9. 207. To the evidence cited in my article (p. 114) must be added an Eretrian *abacus* (*I.G.* xii. 9. 894) bearing the signs

ϙ ϙ ϙ ϙ ϙ ϙ
Χ Η Δ Ι - Χ

Of these, the first eight (reading alternately from the upper and from the lower line) evidently denote 5000, 1000, 500, 100, 50, 10, 5 and 1 dr. The remaining four I interpret as 3 obols, 1 obol, $\frac{1}{2}$ obol and 1 chalkus respectively.

For Zarax we have the evidence of *I.G.* xii. 9. 72, in which occur two numerals, Ηϙ, both mutilated.

30. CEOS. To the nine inscriptions which I cited (*op. cit.* p. 114) I can now add a fourth-century list of loans made by 'the god,' probably Apollo, to 'the state,' published by E. Preuner (*Ath. Mitt.* xlix. 136 ff.) from a copy made by W. Kolbe. In it occur the figures

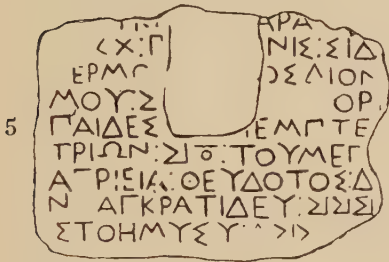
unit employed in the Chian subscription-lists: these almost certainly record gifts reckoned in drachmas.

45. MYTILENE. Possibly *I.G.* xii. 2. 657 should be added to the evidence which I cited (*op. cit.* p. 119). A second-century decree of Methymna, published in *Ἀρχ. Δελτίον*, vi. 99 f., contains the phrase ἄχρι στα(τήρων) ΧΧ[Χ]Η. *I.G.* xii. 2. 74 has been republished in Ditt. *Syll.*³ 968, Schwyzer, *op. cit.* 621.

46. LEMNOS. *I.G.* xii. 8. 18 was republished in *B.C.H.* xxxvi. 347.

47. IMBROS. A. Nagl, *Sitzb. Ak. Wien*, clxxvii. 5. 20, regards *I.G.* xii. 8. 61, 62, no doubt correctly, as fragments of counting-tables.

48. CHALCEDON. In Ditt. *Syll.*³ 1011 the editor has accepted my restoration and interpretation of the closing lines of the inscription.



----- (α)ρα -----
 ----- <X : π νις : σιδ -----
 --- Ἑρμ(ο) (ο)ς Διο(ν) ---
 -- μου : > ----- ορ --
 5 -- παῖδες (π)έμπτε (?) --
 -- τριων : >I > : τοῦ με(γ) ---
 -- α(γ)ριεα : Θεύδοτος : Δ ---
 -- ν [Π]ογκρατίδευ(ς) : >I>I>I ---
 -- ς τὸ ἥμισυ : (ς) >I>I -----

FIG. 2.—INSCRIPTION FROM ERYTHRAE.

50. The Pergamene sacrificial regulations have been republished in Ditt. *Syll.*³ 982, where see notes 14 and 21.

52A. CLAZOMENAE. A lease, of the early third century B.C., published in *B.C.H.* xxxvii. 183 ff., No. 17, has δραχμῶν ΔΔ†††.

53. ERYTHRAE. A fragment in the British Museum, assigned doubtfully to Erythrae and dating from the fourth or third century B.C., has been published by F. H. Marshall, *B.M. Inscr.* iv. 1018: his drawing of the inscription is here reproduced (Fig. 2) by kind permission of the Trustees.¹ In l. 2 Marshall interprets <X : (though with some hesitation) as 1000 dr.: in view of the objection, to which he himself calls attention, that the unit employed elsewhere in this text is the stater, and of the fact that the other amounts mentioned in this document are

¹ My thanks are due to Mr. H. B. Walters for leave to examine the stone.

trifling, I prefer to take < as $\frac{1}{2}$ obol (as at Nemea (?), Epidaurus, Andania, Thespieae and Delos)¹ and x as a χαλκοῦς. In ll. 6, 8, 9 Marshall rightly, I think, interprets Σ as a stater and ο as an obol: in l. 9 the partly defaced sign following ἡμισυ: appears to me to be unquestionably a Δ, either plain or with some attached sign, denoting 10 staters.

54. TEOS. A Tean decree, probably of the late third or early second century B.C. (*B.C.H.* xlvi. 312 ff., No. 2, cf. xlviii. 25, note 5; republished *S.E.G.* ii. 580), has (l. 6) ἀπὸ δρα(χμῶν) Ϟx and twice (ll. 14, 16) δρα(χμὰς) xxx. In a document relative to the construction of a wall in the third or second century B.C. (*B.C.H.* xlvi. 323 ff., No. 4, cf. xlvii. 546; republished *S.E.G.* ii. 582) we have in l. 8 δραχμαὶ ϞHHΔΔΔΔϞ and in l. 9 ϞHHHϞΔΔΔΔ||| and ΔΔΔΔΠ|C. The first of these amounts is 740 dr. 5 ob., the second and the third appear to me to be 890 dr. 3 ob. and 45 dr. 1½ ob. respectively.² The system in use at Teos, then, is the Attic system with the substitution of Ϟ for ||||| as the sign for 5 obols.

58. *S.G.D.I.* 4262 has been republished in *Am. Journ. Phil.* xxxiv. 455 ff., No. 7.

60A. CALLATIS. In *Dacia*, i. 156, No. 29, a fragment of a *pithos* was published, round the mouth of which are the signs ψϞ|||, probably indicating the capacity of the vase. The sign ψ denotes 1000 at Tegea, Thespieae and Boeotian Orchomenus; but so high a value is antecedently improbable here and we must rather take ψ as denoting 50, as it certainly does at Chersonesus Taurica (*B.S.A.* xviii. 123 f.). The vessel, then, contained 58 measures.

Very similar is the inscription on the rim of a *dolium* copied by K. Škorpil in the Bulgarian village of Sara Musa, near the Roumanian frontier, and published, with a facsimile, by E. Kalinka, *Antike Denkmäler in Bulgarien* (Vienna, 1906), 338, No. 445. Kalinka doubtfully, but rightly, interpreted ψΔϞ| as 67.

61. CHERSONESUS TAURICA. The inscriptions *I.O.S.P.E.* i. 226 and iv. 80 were republished in 1916 as *I.O.S.P.E.* i². 403: there Latyschev repeats from the earlier edition, with merely verbal alterations, his comments on the numeral signs, making no reference to my discussion (*B.S.A.*

¹ Or, less probably, as a drachma (as at Tegea).

² I cannot accept the view of the first editors, R. Demangel and A. Laumonier (*B.C.H.* xlvi. 325), followed by W. Crönert (*S.E.G.* ii. 582, note), that the second group of signs represents 893 drachmas, or that of Crönert (*ibid.*) that the third denotes 46 drachmas 1 obol.

xviii. 123 f.) or to my interpretation of the cognate Chalcidonian signs (*J.H.S.* xxxiii. 27 ff.). I need not here reiterate what I have already said in support of my view.

On a sphere of green diorite, published in *I.O.S.P.E.* iv. 184 and repeated in *i*². 653, are inscribed four letters 'of the Roman age,' $\Delta\overline{\Delta}\overline{\Pi}$. These, doubtless, indicate the weight of the stone, but Latyshev does not determine what is the unit in question.¹

$[X = 20 \text{ tal.} = 1200 \text{ minas}]$	$X = 20 \text{ dr.}$
$\gtrsim = 4 \text{ " } = 240 \text{ "}$	$\gtrsim = 4 \text{ "}$
$\sqcap = 2 \text{ " } = 120 \text{ "}$	$\sqcap = 2 \text{ "}$
$Z = 1 \text{ " } = 60 \text{ "}$	$Z = 1 \text{ "}$
$> = 10 \text{ minas}$	$> = 1 \text{ ob.}$
$\sqcap = 5 \text{ "}$	$- = \frac{1}{2} \text{ "}$
$- = 1 \text{ mina}$	$\Delta = \frac{1}{10} \text{ "}$

EXAMPLES:-

(a) Year of Eukleidas.

Receipts	M: $\gtrsim \sqcap \sqcap = - XXX \gtrsim \gtrsim \gtrsim \sqcap Z > \Delta \Delta$
Expenditure	M: $\gtrsim \sqcap - XXX \gtrsim \gtrsim \gtrsim Z > > - \Delta \Delta$
Balance	M: $\sqcap = \gtrsim Z > > \Delta \Delta \Delta \Delta$

(b) Year of Timonax.

Receipts	M: $\gtrsim \sqcap = X \gtrsim \gtrsim \gtrsim Z > > - \Delta$
Expenditure	M: $\sqcap Z \sqcap X \gtrsim \gtrsim \gtrsim \sqcap Z > > > - \Delta$
Balance	M: $\sqcap Z - XXXX \gtrsim \gtrsim \gtrsim Z > > >$

FIG. 3.—NUMERAL SYSTEM AT CYRENE.

61A. CYRENE. A fourth-century *cippus* discovered at Cyrene in 1915, during the Italian excavation of the temple of Demeter, bears five balance-sheets together with detailed price-lists of *καρποί*. S. Ferri has given a brief account of this interesting inscription in *Aegyptus*, iv. 172, 182, with a summary of his interpretation of the numerical notation there

¹ I am indebted to Miss C. A. Hutton for kind help in the collation of the two texts I have cited from *I.O.S.P.E.* *i*².

used (p. 181, Fig. 7). As that notation is only to a very slight extent, if at all, acrophonic, and as the text of the inscription still remains unpublished, I need not here discuss the unique system there represented. I therefore content myself with giving a table, based on unpublished materials generously placed at my disposal by Dr. Ferri, shewing the values which he attributes to the various signs employed (Fig. 3). It is true, as the editor frankly admits, that this interpretation forces us to assume that several errors have been committed either by the accountant or by the engraver, but I am unable to suggest any more satisfactory solution of the problem presented by the inscription.

62. For a further discussion of the numeral signs depicted on the 'Darius vase' see A. Nagl, *Sitzb. Ak. Wien*, clxxvii. 5. 20 f. and Fig. 5.

From the foregoing survey I omit *C.I.G.* 4018 (Ancyra), where $\phi\upsilon\lambda\eta$ $\overline{\Delta\Gamma}$ probably indicates the fourteenth rather than the eleventh tribe, *i.e.* the numerals are alphabetic rather than acrophonic. In a Syracusan epitaph (*Notizie degli Scavi*, 1893, 280), $\epsilon\nu\theta\acute{\alpha}\delta\epsilon\mid\kappa\acute{\iota}\tau\alpha\iota\mid\pi\rho\epsilon\sigma\mid\beta\acute{\upsilon}\tau\epsilon\rho\omicron\varsigma$ $\Delta\acute{\alpha}\rho\sigma\eta\mid\zeta\eta\sigma\alpha\varsigma\epsilon\tau\eta\mid\pi\epsilon$, it is clear that the age of the deceased is 85 and not, as the editor holds, $\pi\epsilon(\nu\tau\eta\kappa\omicron\nu\tau\alpha)$. A graffito from Pompeii published *op. cit.* 1919, 242,

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

also seems to me to be irrelevant to the present study, as well as the numerals found in inscriptions written in the Cyprian syllabic script.¹

On p. 125 of my previous article I referred to the legend $\chi\alpha\alpha\kappa$ III on a fourth-century coin of Apollonia on the Rhyndacus. Mr. G. F. Hill has kindly drawn my attention to the fact that I derived this reading from the first edition of Head's *Historia Numorum*, but that the second edition (p. 277) gives the true reading $\Delta\iota\chi\alpha\alpha\kappa\iota\eta$ (presumably a coin of two chalkoi) and rightly assigns the coin to Apollonia in Thrace.

Conclusions.—My conclusions remain, as I said at the outset, practically unaltered. It is possible that the recently discovered inscription from Corinth affords the earliest extant example of acrophonic numerals. On pp. 128 f. of my article I discussed the latest epigraphical evidence for the use of such numerals in Attica, and especially a puzzling decree from the Acropolis, published originally by C. D. Tsountas in *'Εφ. 'Αρχ.* 1884,

¹ See J. L. Myres, *Handbook of the Cesnola Collection*, Nos. 1854 (pp. 306 f., 530), 1868 (pp. 310 ff., 534 ff.), 1884 (pp. 316 f., 540). Cf. Schwyzer, *op. cit.* 679.

165 ff., and more recently by J. Kirchner in *I.G.* ii². 1035. The chronology of this inscription has been carefully investigated by P. Graindor,¹ who rejects Keil's view, followed by Kirchner, that it must fall before 86 B.C., and, while not excluding the possibility of its belonging to the second century of our era, inclines to the belief that it should be dated about the middle of the first century A.D. The same scholar, in a discussion of the entrance of the Acropolis under the Empire, points out² that at the foot of a list of *πυλῶροι* belonging in all probability to the reign of Claudius is the group ΔΔΓΔΙ, almost certainly contemporaneous with the list.³ The reading admits of no doubt and its interpretation as a numeral complex can hardly be questioned, though its reference cannot be determined and its value is doubtful: possibly the engraver intended to write ΔΔΔΓΙ. If Graindor correctly dates the two inscriptions in question, they give us, apparently, our latest examples of acrophonic numerals in Attica, but we cannot determine with certainty which is the later of the two.

We need not here discuss *I.G.* iii. 409, for, though Dittenberger thought that the lunar ζ indicated a date later than 31 B.C., U. Koehler, who republished the text in *I.G.* ii. 1077, was doubtless right in assigning it to a much earlier period,⁴ possibly even to the fourth century B.C.

APPENDIX.

On *I.G.* v. i. 1532.

On 15th November, 1905, there appeared in the Athenian periodical *Παναθήναια*, vi. 94 f., a paragraph recording that the Head Master of the school at Diavolitzí had reported to the Ministry of Education that in the village of Bougázi there had been found in an ancient temple a slab 65 cm. in length and 55 cm. in breadth, bearing on one face 41 ancient names. Near the temple were also discovered Pelasgian walls and remains of ancient towers. To this announcement was added the following note: ‘Πρόκειται περὶ τῆς ἐν θέσει “Γρεμπενή” τῆς περιφερείας “Γαράντζας” τῆς Ἀνδανίας εὐρεθείσης πρὸ μηνῶν κατὰ τὴν ἐπισκευὴν τοῦ ναοῦ “Ἅγιος Δημήτριος” ἐπιγραφῆς, περὶ ἧς μοῦ ἔγραψεν ὁ ἐκεῖ ἱερεὺς καὶ

¹ *Chronologie des archontes athéniens*, 142 ff. Cf. *B.C.H.* xxxviii. 280, note 1, *Musée Belge*, xxviii. 117.

² *B.C.H.* xxxviii. 279 f.

³ *Ibid.* 275. Cf. *I.G.* iii. 1284 F.

⁴ See especially his note on *I.G.* ii. 1152.

δημοδιδάσκαλος κ. Ν. Γρόνος καὶ μοῦ ἔστειλε καὶ ἀντίγραφον προχείρως ληφθὲν ὑπ' αὐτοῦ ἐκ τῆς πλακός, οὐχὶ ὅμως καὶ ἔκτυπον· ἡ πλάξ ἔχει κατὰ τὸν κ. Γρόνον ὕψος 0, 60, πλάτος 0, 65, πάχος 0, 15· ἀναγράφονται ἐπ' αὐτῆς "εἰσφοραὶ" πιθανῶς ἡ μεταγραφὴ τῶν ἀσφαλῶν γραμμάτων ἔχει ὡς ἐξῆς.¹ The text which followed found its way, in a copy made by Koch, into *I.G. v. i.* 1532, though in the process several inaccuracies crept in,¹ the most serious of which was in l. 39 (col. iii, l. 16), where the $M_{\Sigma \Sigma \Sigma}^{\Delta \Delta \Gamma}$ of *Γρόνος* appears in the *Corpus* as $M_{\Sigma}^{\Delta} \uparrow \Sigma^{\Delta} \uparrow \Sigma^{\Pi}$.

In *Jahresh.* xvii. 87 ff. A. Wilhelm discussed the text at some length, interpreting it as a list of payments connected with an ὀκτώβολος or other similar εἰσφορά and identifying the Mnasisstratus, who figures as the largest contributor, with the man of that name mentioned in an Argive inscription (*B.C.H.* xxxiii. 175) and frequently referred to in the long document relative to the Andanian mystery-cult (*I.G. v. i.* 1390). Wilhelm further drew attention to the unsatisfactory nature of the text presented in *I.G. v. i.* 1532 and expressed the hope that a more reliable copy would soon be published.

In *Ἀρχ. Δελτίον*, ii. παράρτημα, 74, B. Leonardos reported that the stone had been deposited in the Epigraphical Museum at Athens (Inv. No. 12461) and that it proved to be inscribed on both front and back.

The revised text and transcript which I here offer owes much to the help which I have received from three scholars, to whom I tender my sincere thanks. Dr. Leonardos has kindly permitted me to republish the inscription and with characteristic generosity has sent me not only a squeeze of the stone, which has proved invaluable to me and has served as the basis of the accompanying facsimile, but also his own provisional copy of the proper names in col. ii and at the head of col. iii. A number of readings have been checked or revised at my request by Mr. R. P. Austin, while Mr. A. M. Woodward has, in addition to sending me an additional squeeze, examined the stone, of which he gives the following description. 'The obverse varies in height from .57 to .44 m. : the stone is broken and flaked above, as from violent horizontal splitting. Width .65 m. (both edges complete). Average thickness .15 m. The material is a hard (magnesian?) limestone with many veins and the uneven surface tends to puncture the squeeze. The obverse has *ca.* .19 m. vacant below the inscription.'

¹ Γουρεμπενή for Γρεμπενή, Γαράνζας for Γαράντζας, the statement that *ectypum fecit* Γρόνος, etc.

The text on the obverse is shown in facsimile in Fig. 4 and, so far as I have been able to decipher it, runs as follows :

-----ξ--	Δ----		
-----πιθ--ευ ξξ-----X	Εὐ-----		
Ἐργίων ξξξξξξξξ	Φιλοδαμ[ος--]		
....ρχος M---	Φιλίας ξξ--		
5 -----	Λυκόφρων M---		
--λ-s ξξ. ξ--X X X	Ἀρχιλλος Mξ--		
Μελήσιππος M---	Ξενόδαμος M M ξξ-----X		
Θαλιαρχίδας M ξξξξξξξξ	Φρασιδαμος M M M ξξξξξξξξ<>X		
Νικίας M ξξξξξξξξ--X	Πάνσοφος M M ξξξξξξξξ>X X		
10 Μινάσαρχος M M M ξξξξξξ	Χαυρήμων M M ξξξξξξξξ		
Μινασίστρατος Δ M Δ ξξξξξξξξξξ	Ξαιρήμων M M ξξξξξξ		
Νεοκλής ξξξξξξξξ	-----M ξξξξ		
[Π]αντόνικος M ξξξξξξξξξξ	Ἀριστοκράτης ξξξξξξξξ<>X X		
[Ε]πίχαρτος M ξξξξξξξξ<>X	Εὐμαρίδας M ξξξξξξξξξξ		
15 [Εὐ]δαμῶν M M ξξξξξξ	Θαλία ξξξξξξξξξξ		
[Σ]μίας ξξξξξξξξ	Φιλόξενος M M ξξξξξξ		
[Δ]υκόφρων M M ξξξξ<>X	Μικίων M . ξξ		
[Δ]ισχυρίων M M ξξξξ	Θηρόμαχος M ξξξξξξξξ		
[Δ]αμόστρατος ξξξ	Ἐρατίας M ξξξξξξξξ		
20 [Φ]ίλων M ξξξξ	Θεοπομπίδας ξξξξξξ		
... μένης ξξξξξξξξξξ<>X	Ἀλεξικράτης ξξξ		
[Καλ]υκράτης M ξξξξξξ<	Δαμόλυτος ξξξξ		
[π]όλυς Πυλανεών Δ M M ξξξ	Πασικλής M M		
[Ν]ικάνδρος M			

10

15

20

Ἀρίστων - ξξ-----
 Ξενοκράτης M ξξξξ-----
 Ἰσόδαμος ξξξ
 Ἀρίσταρχος ξξξ
 Νικίας M ξξξ
 Δαμίσκος ξξξξ
 Δάμυππος M M ξξξξξξξξ<X
 Δουκράτης ξξξξξξξξξξ<X
 Ἀγίων M ξξξ
 Στράτων ξξξ
 Εὐμάρης ξξξξ>X X
 Καλλίκεα ξξξξ<X X
 Δαμόστρατος ξξξξξξξξ
 Δριμύλος M ξξξξξξξξ
 Ἀρίστων M ξξξξξξ<>X
 Πύθιος M M M ξξξξξξ

It would serve no useful purpose to call attention in detail to the divergences between this version and that given in *I.G.*, and I therefore content myself with noting the following textual points.

Col. i, ll. 1-6. The surface of the stone is here so badly worn that I have found it impossible to decipher these lines and the readings offered must be accepted with the greatest caution. L. 2 possibly begins *Φιλ*-. In l. 4 an A seems faintly discernible as the fourth letter and the name therefore probably ends in *-αρχος*. In l. 5 nothing is legible: perhaps the entry has been deliberately erased (cf. ii. 12). In l. 6 the name may end in *-κλῆς*.

L. 9. I am uncertain what precedes the final *χ*: perhaps *Η*.

L. 17. I am a little dubious about the first *Μ*.

L. 21. If I am right in thinking that a circular letter precedes *-μένης*, the name may be *Θεομένης* or, possibly, *Προμένης* (cf. Bechtel, *Historische Personennamen*, 311).

L. 23. *Πυλανέων* now seems to me to be certain, though at first I read *Εὐλανέων*. I cannot determine whether *Γ* or *Δ* stands below the second *Μ*.

Col. ii, l. 3. The opening letter is very faint and my reading is uncertain. In l. 4 also the name is doubtful: the third letter may be *Δ*.

L. 12. The entry has been intentionally erased.

L. 17. The second numeral sign may be that for 5 staters.

L. 19. The final *κ* is uncertain, as is also the final *ξ* of l. 21.

Col. iii, l. 8. I am not sure what follows *Ἀρίστων*, the double *ξ*, which I have marked, being far from certain. Possibly the name was a longer one, e.g. *Ἀριστῶναξ*, *Ἀριστῶνδας* or *Ἀριστῶνυμος* (cf. Bechtel, *op. cit.* 72 f., 350).

L. 23. A previous entry seems to have been erased in this line.

After Wilhelm's discussion, it is unnecessary for me to reopen here the question of the significance and date of the inscription.

All the names recorded in the list are those of men with the exception of *Θαλία* (ii. 15) and *Καλλίκλεια* (iii. 19): in no case (with the possible exception of i. 2) is a patronymic given, which is surprising in view of the recurrence of certain names—*Ἀρίστων* (iii. 8, 22), *Δαμόστρατος* (i. 19, iii. 20), *Λυκόφρων* (i. 17, ii. 6) and *Νικίας* (i. 9, iii. 12). The following

names must be added to Bechtel, *op. cit.* : 'Εργίων (if i. 3 is rightly read), Εὐμαρίδας, Θαλιαρχίδας, Θεοπομπίδας, Θηρόμαχος, Πάνσοφος, Παντόνικος Φρασίδαμος. On the other hand, Πάνσωος, due to the mistaken reading of ii. 10 by the first editor, must be deleted.

Especially interesting is the appearance, side by side with these individual citizens, of a community, the πόλις Πυλανέων, which makes, as we might antecedently have expected, the largest recorded payment, viz. 17 (or 22) minas, 7 staters. On this 'city' I can throw no light. It can hardly be the famous Pylus, whose inhabitants are invariably termed Πύλιοι, nor is it easy to connect it with Pylae, which occurs in Pliny's list of the Arcadian States (*Nat. Hist.* iv. 20), but is otherwise unknown. A city Πυλήνη (which in a Dorian-speaking country might well be called Πυλάνα), later renamed Proschium, is mentioned by Homer (*Il.* ii. 639), Strabo (x. 451, 460) and other writers, but that lay in Aetolia, far beyond the scope of the present inscription.

I turn finally to that aspect of the inscription which first drew my attention to it. We find therein ample evidence for a monetary notation of the acrophonic type not found elsewhere. Apart from uncertainties of reading, the amounts can all be interpreted with ease save that in i. 11, which presents the peculiar group $\Delta \overset{\rho}{\Sigma}$ between the sign for a mina and that for 10 staters. I conjecture that the stonemason wrote Δ instead of ξ and $\overset{\rho}{\Sigma}$ instead of $\boxplus$ and then engraved the signs correctly but omitted to cancel those which were faulty: in that case the total payment of Mnasiatratus was a little over 11 minas, 18 staters. In the sign for 10 minas, the Δ might be written either above (i. 11) or below (i. 23) the $\mathbf{M}$. The signs for 10 and 5 staters and for 1 stater are also strictly acrophonic and present no difficulty. The drachma ($\frac{1}{2}$ stater) is represented by $\mathbf{P}$ and the obol by $\mathbf{I}$, as at Athens, Delphi and elsewhere: $\mathbf{T}$, which occasionally intervenes between them, must therefore denote τριώβολον (3 obols), as at Thespieae, Naxos, etc., and not τεταρτημόριον ($\frac{1}{4}$ obol), as at Athens, Delos, etc. Below the obol come the signs $<$ and $>$, denoting $\frac{1}{2}$ and $\frac{1}{4}$ obol respectively, followed by χ , the χαλκοῦς: since in two places (i. 6, 12) we find $\chi\chi\chi$, it would seem probable that the Messenian χαλκοῦς was $\frac{1}{16}$ rather than $\frac{1}{12}$ or $\frac{1}{8}$ obol (cf. Kubitschek *ap. Pauly-Wissowa*, iii. 2098 f.). Lastly, we find in this system, and in it alone, a sign for a coin lower than the χαλκοῦς,

namely κ (κόλλυβος): from the fact that this κ occurs singly seven times in the inscription and is never doubled I infer that, whatever may have been the case elsewhere (see Regling's article *s.v.* in Pauly-Wissowa, xi. 1099 f.), the κόλλυβος was in Messenia half of the χαλκοῦς.

These results I have summarised above (p. 143).

T. Reinach's paper on the *Kollybos*, read to the Académie des Inscriptions on March 30th, 1928 (cf. *C. R. Acad. Inscr.* 1928, 110), is still, so far as I know, unpublished.

MARCUS N. TOD.

A PREHISTORIC SITE IN WESTERN MACEDONIA AND THE DORIAN INVASION

(PLATES XIII, XIV.)

- A. The site and its surroundings.
- B. The finds—(I) Remains of huts, etc. (II) Pottery. (III) Miscellaneous objects of terracotta. (IV) Metal, stone, etc.
- C. Chronology of the site.
- D. Relationship to other sites: (I) In the Bronze Age. (II) In the Transitional and Early Iron Age.
- E. Dorians and Macedonians.

A. THE SITE AND ITS SURROUNDINGS (Fig. 1).

The geographical configuration of Western Macedonia, resolved into its simplest elements, may be described as consisting of two parallel depressions, running roughly north-west and south-east, and separated from one another by a mountain range, the whole area being itself entirely enclosed by mountains. The eastern of the two depressions has a northern and a southern half. The northern half is the valley of the upper Černa, the southern is composed of the low land round the western end of Lake Ostrovo, which is connected by a narrow corridor with the valley of the middle Haliákmon. Similarly, the western depression has two well-defined areas. The northern is the basin of Lake Ochrid and the plain of Korytzá; the southern, the basin of the upper Haliákmon and its tributaries.

Access to these depressions is obtained at the following points. Into the north-east corner of the eastern depression by the Babouna Pass (3,445 feet) (Fig. 1, 1),¹ or by a pass a little further south (3,162 feet), by

¹ Heights are as given in *Admiralty Handbook, Macedonia and surrounding Territories*, 1916. For the geography of the district, cf. also Wace and Woodward, *B.S.A.* xviii. pp. 166, 167. My authority for the spelling of place-names is Col. N. Th. Schinás, *Ὁδοποικὸν Μακεδονίας*, Athens, 1886. The spelling on the map (Fig. 1) does not always agree.

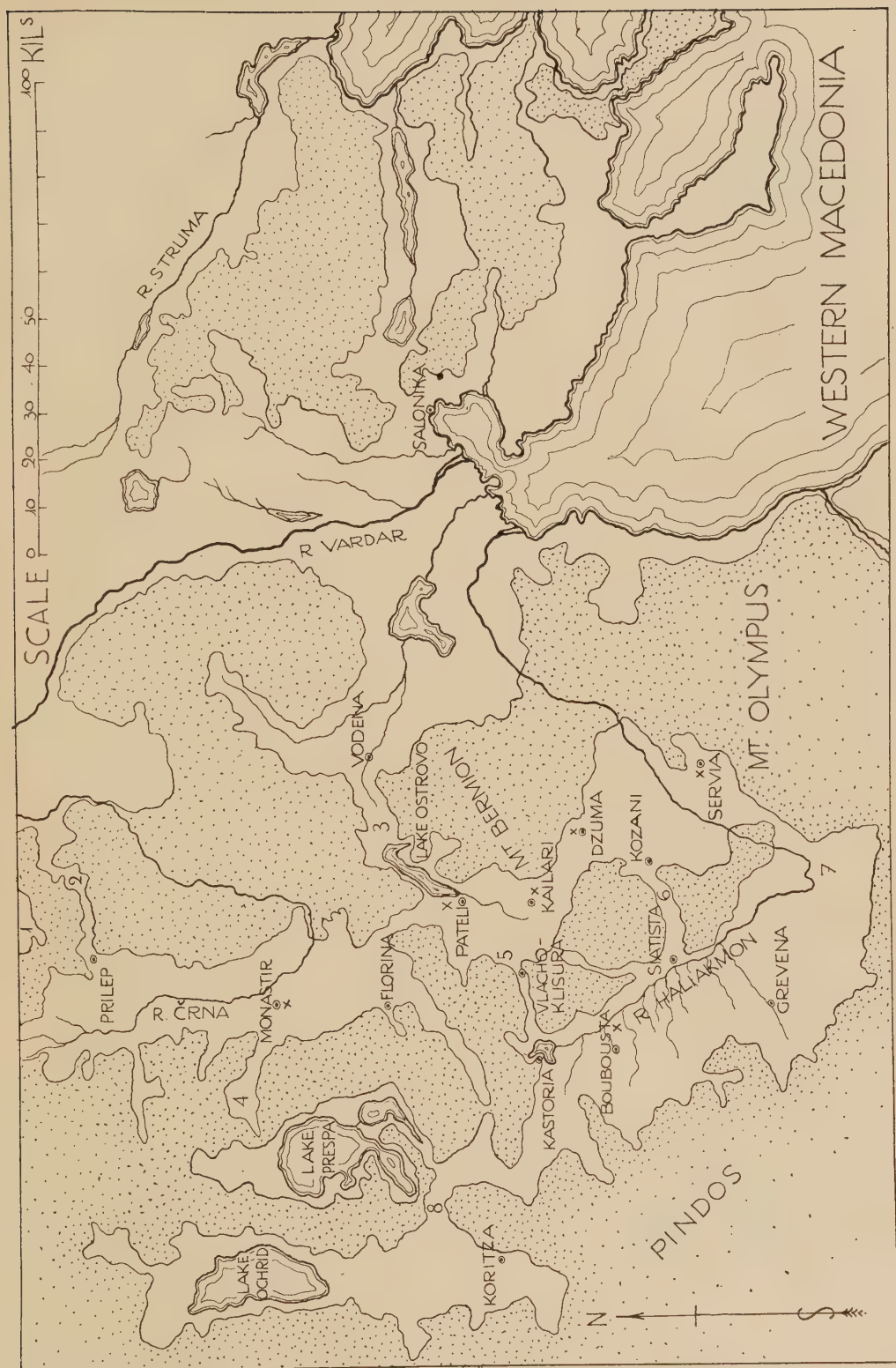


FIG. 1.—MAP OF W. MACEDONIA.

which goes the modern road from Gradsko to Prilep (*ibid.* 2). Further south, by an easy route (2,000 feet), leading from the Central Macedonian Campagna past Vodená and the shore of Lake Ostrovo, both halves of the eastern depression can be reached (*ibid.* 3). South of this there is no easy access; the Haliákmon pierces the mountain range in too steep a gorge, so that the modern road from Vérroia has to climb to 5,000 feet before it descends to the Kozáne plain.

Between the eastern and the western depression there are the following passes. West of Monastir the route of the Via Egnatia (*ibid.* 4) rises twice to nearly 4,000 feet before reaching Ochrid. Immediately west of Flórina the modern road into Albania crosses the mountains with difficulty, and Kastoría itself is separated from the Ostrovo district by the Vlacho-Klisoúra (4,000 feet) (*ibid.* 5), a difficult crossing; but further south an easy gap (about 2,500 feet) (*ibid.* 6) leads from Kozáne to Leipsíste or Kastoría.¹ Finally, from Kastoría the plain of Korytzá is reached by the valley of the Zélova and the easy pass of Tsankóni (*ibid.* 8).

To the west and south-west of the whole area, the mass of Pindus presents an almost insurmountable natural barrier, not merely on account of the height of the passes, but on account of the difficulty of the country. Communication between the two sides of the range would only exist if special circumstances required. Such circumstances, of course, explain the Roman road. To-day, Lake Ochrid and Elbasan, Korytzá and Berat, Korytzá and Hagioi Saranta are being linked up by a system of excellent roads.

South of our area, the Olympus *massif* and the Cambounian mountains do not invite, though they certainly do not preclude passage; and, in fact, we know that in very early times, Thessalians crossed into Macedonia, since sherds of the first and second Thessalian Periods have been picked up at a mound by the bridge below Servía.²

To the north, the Treška and Babouna mountains form a less imposing barrier, and the latter could be crossed by the pass we have already mentioned.

Geographical considerations would thus lead us to expect that the

¹ I have not been on the road that connects Servía and Grevená (*ibid.* 7, and *Admiralty Handbook*, Route 62), but the country does not seem to present insuperable difficulties even if the road did not exist.

² Cf. Wace and Thompson, *Prehistoric Thessaly*, p. 254, note 2. I collected sherds here in 1926.

cultural relations of the people of these valleys should be looked for to the east, south, or north; but, in any case, east of the Pindus range.

Prehistorically, the area has been little explored. Apart from the mound below Servía already mentioned, sherds have been collected from a group of mounds in the Monastir plain, which indicate an early occupation by a people akin to the earliest Anatolian settlers in Central Macedonia.¹ Prehistoric sites have been reported, but have not yet been explored, near Kaílár, and at Džuma in the Kozáne plain.² A cemetery at Pátele, at the western end of Lake Ostrovo, was excavated some years ago by Russian archaeologists, from which the vases, now in the Constantinople Museum, have close relation to the finds from Bouboústi, which is the subject of my paper. Finally, there are in the Vienna Museum two swords of Mycenaean type, said to come from Grevená:³ and some small bronze objects of the Iron Age have been found at Dovrántovo in the same neighbourhood.⁴

Bouboústi itself lies half-way between Chroúpista and Leipsíste, actually two hours' walk from each. From Chroúpista to the great bend, the right bank of the Haliákmon is formed by a steep escarpment, intersected by innumerable ravines, by which winter torrents find their way into the main stream. Between two such ravines lies the prehistoric site.

Fig. 2 is a view taken from the river-bank on the north, and shews the point of the escarpment, above which the site lies.

Fig. 3 is a view taken from the site itself, looking north towards Kastoría, and shews the contrast between the right and left banks of the river at this point.

The immediate surroundings of the site are best explained by the rough sketch-plan (Fig. 4). The point of the escarpment on which it lies is here connected by a narrow neck with higher ground to the west. Otherwise the site is surrounded by steep slopes, ravines on north, south and west, and on the east by the face of the escarpment overlooking the river.

It will be noted that from the highest point the escarpment falls at once abruptly to the south, but has a more gradual slope to the north for

¹ Cf. *B.S.A.* xxvi. p. 34. Also at Armenochóri, near Flórina. Cf. *Report for Session 1926-27*, p. 11.

² Information kindly supplied by Mrs. Hasluck, and by Dr. Keramopoulos.

³ Cf. Casson, *Man*, Nov. 1923, p. 172.

⁴ Cf. Casson, *Macedonia, Thrace and Illyria*, p. 172, and Wace and Woodward, *B.S.A.* xviii. p. 182. Cf. also *ibid.*, p. 187.



FIG. 2.—THE ESCARPMENT FROM THE NORTH.



FIG. 3.—VIEW FROM SITE, LOOKING NORTH.

about 55 metres, where the edge of the ravine begins. It is on this comparatively gentle northern slope that the site lies. To the east the ground falls still more gradually to the edge of the escarpment overlooking the river.

The discovery of the prehistoric site was due to Dr. Pelekides, Ephor of Antiquities for Macedonia, who courteously allowed us to explore it. Excavation was begun on June 6, 1927, and continued till June 16.¹ The site was found to be very small, roughly oval in shape, about 20 metres

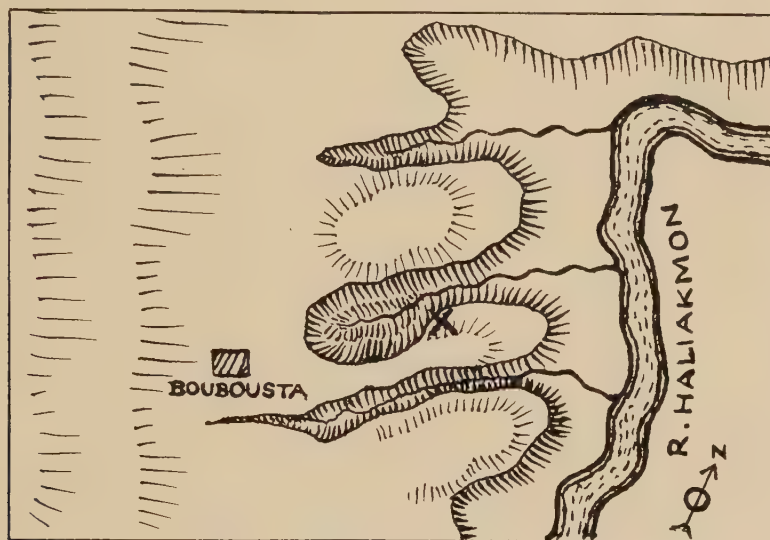


FIG. 4.—SKETCH-MAP OF DISTRICT. (Scale, *ca.* 1 : 10,000.)

at its greatest length and 8 metres at its greatest width (Fig. 5). The average slope of the virgin soil is about 1 in 3, except at the south end, where a sharper fall limited part of the site in this direction (*ibid.*, Section AA). The average depth of the deposit was about 1 metre, varying with the irregularities of the virgin soil. At the north end it was terraced up by walls in Greek times (*ibid.* 9, 10, 12), and a Greek house-wall (*ibid.*, 11), with a pithos *in situ* (*ibid.* 11, Section ZZ)² cut into it in the north-west

¹ Joint-excavators with myself were Miss H. L. Lorimer and Mr. R. W. Hutchinson. The expenses of the excavation were met by generous grants from the British Association and from the British School at Athens (Macedonian Exploration Fund).

² The pithos was sunk into virgin soil to a depth of .8 m. Only the rim projected. It was covered with a round stone slab.

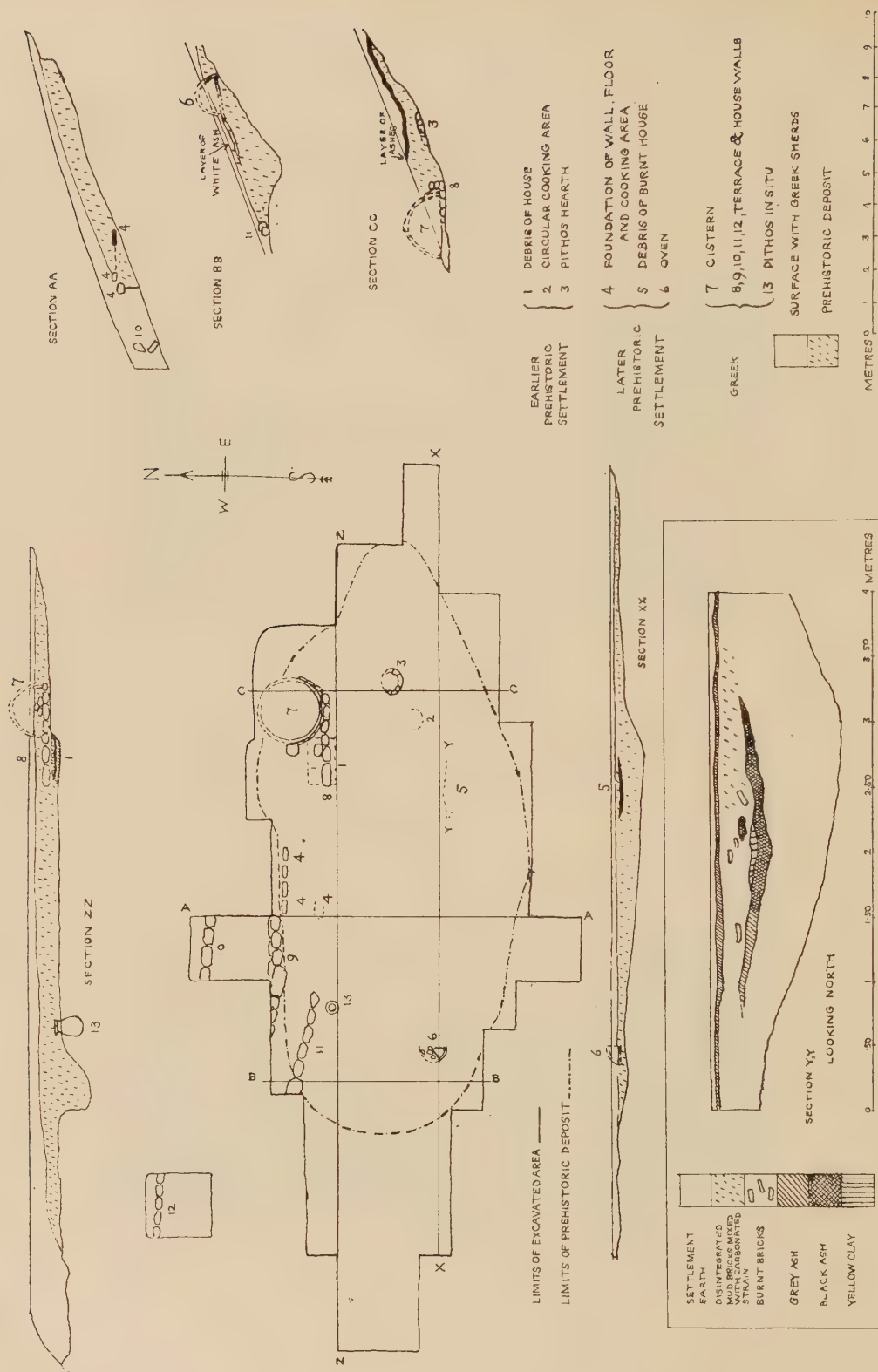


FIG. 5.—PLAN AND SECTIONS OF SITE. (In sections ZZ, YY, XX, the surface is assumed to be horizontal.)

corner. In the north-east corner the stone foundation and lower courses of a Greek cistern with a corbelled roof of bricks were associated with the terrace-walls (*ibid.* 7, 8, and Sections ZZ, CC). North of these, the pottery was almost exclusively Greek, and Greek sherds were scattered thinly all over the site.¹

The prehistoric deposit was composed of the debris of mud-brick and reed huts, one of which had a stone foundation-wall (*ibid.* 4). Four hearths, one of particularly interesting construction, were found, and one oven.

Two stages of occupation could be distinguished by means of the fixed remains (hearths, etc.) but, apart from these, stratigraphic changes were imperceptible. This is not surprising in view of the denudation caused by torrential rains on a steep slope, and much of the deposit may belong to huts which once stood higher up the hillside. Little chronological significance, therefore, can be attached to the position of objects within the deposit, except where they are associated with fixed remains. In any case, the character of the finds was homogeneous, the pottery (mostly painted), which was abundant throughout, shewing no traces of development or of change.

Taken in conjunction with the smallness of the site—which can hardly represent more than four or five huts—the quantity of the pottery suggests that the site was occupied over a fairly long period, but not necessarily continuously. As a shepherd encampment the place has many natural advantages: an abundant spring of water; an easily defensible position, if attack was feared, since, apart from the steep ravines that almost surround it, it commands a wide range of country; a ford across the river below; and above all, good grazing on the downland just above.

B. THE FINDS.

(I) *Remains of huts, hearths, etc.*

To the first stage of occupation belong—

(1) The debris of a house below the Greek terrace-wall in the N.E. corner, marked by layers of ashes; and a layer of small pieces of carbonised wood (*ibid.* 1 and Section ZZ).

(2) A circular area of clay and ashes, 1 m. in diameter, 40 cm. thick (*ibid.* 2). Probably a hearth.

¹ The Greek remains are too scanty to merit fuller description. The pottery, which includes some local imitations, ranges from the fifth to the second century.

(3) A circular hearth 1.05 m. in diameter, resting on virgin soil, which here has a slope of 1 in 3 (*ibid.* 3, Section CC, and Fig. 6). The whole of the southern half was formed of a section from the body of a great pithos, originally in one piece. Practically the whole of the northern half had fallen away and fragments were found below and outside the curve. The circle was paved with sherds, mainly from the same pithos, but also from a second pithos, all

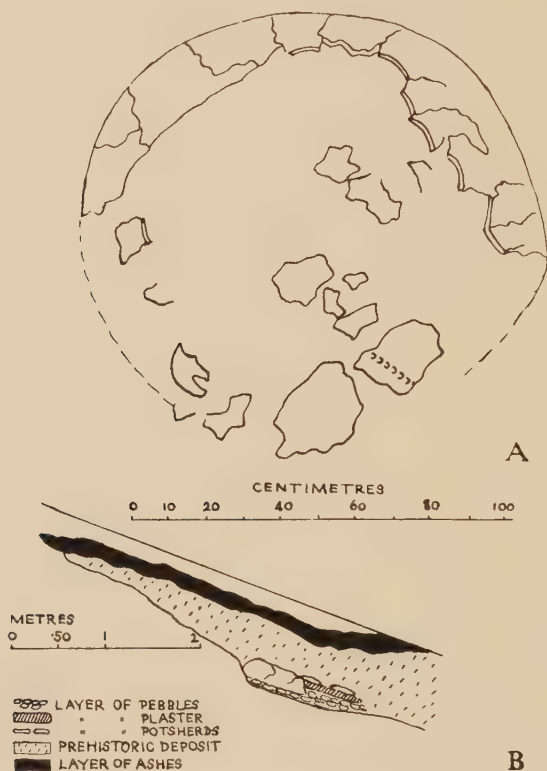


FIG. 6.—PITHOS-HEARTH.

A. Sketch-plan. B. Section of Trench, looking West.

much blackened by fire. Beneath the sherd paving was, in part of the area, a layer of plaster, blackened on the upper side; elsewhere calcined earth interspersed with patches of carbonised matter. Beneath this again, a rough pavement of pebbles, also much blackened by fire. There would seem, therefore, to have been three stages in the use of the hearth: the pebble pavement, the plaster pavement, and the potsherd pavement.

The pithos border rested on unblackened pebbles: the average thickness from the top of the border to virgin soil was .7 m. Below the hearth the

earth was calcined and mixed with carbonised patches. The pottery associated with the hearth was mostly plain. On the sherd pavement rested some bones and fragments of 'griddles.'

To the second stage of occupation belong—

(4) The line of stones already mentioned with traces of a floor of hard red earth to the south, and a cooking-area of ashes, in which lay fragments of a plain cooking-pot (Fig. 5, 4).

(5) The debris of a burnt house made of mud-bricks with a roof of reeds (*ibid.* 5, and Sections XX, YY).

(6) An oven, semicircular in shape, with a domed roof of plaster (*ibid.*, 6, Sections XX, BB and Figs. 7, 8). The floor consisted of two layers of pebbles (1 cm. thick), a layer of flat stones interspersed with potsherds (5 cm. thick), and, above the stones and potsherds, a layer of plaster (5 cm. thick), which was carried up at the edges to form the roof. Three flat stones lay against the outside of the roof on the south side. The roof was preserved to a height of 20 cm. at the south-east corner, whence the broken edge, projecting slightly above the floor, continued for 70 cm. (Fig. 8). On the west and north both roof and floor had disappeared. The length of the eastern face in which the door would have been is estimated at *ca.* 1.20 m. A layer of white ashes about 15 cm. thick, containing carbonised wood, and extending down the slope on the north side for 2 metres, marks the ashes thrown out of the oven.

(II) Pottery. Painted.

Fabric. The pottery is all hand-made, usually of grey clay fairly well purified. The walls are rather thick, .5 cm. on an average in the case of the large vases; .3 cm. in the case of the small. The surface colour is buff, brick-red, grey, or rarely brown: it is carefully smoothed and has a slight polish.

Shapes (Figs. 9–18). *Type 1. Jugs with cut-away necks.*

(a) The neck is conical, and there is a slight ridge at the shoulder (Fig. 9). At Pátele in this class the neck often has a 'chin' (Fig. 30, 6).

(b) The neck, which is slightly concave in profile, is set upright on the body. The lip is straight, and is cut sharply away (Fig. 10).

(c) Same as above, but lip and rim merge almost imperceptibly (Figs. 11, 19).

(d) In a fourth class, inferred from fragments and from complete specimens from Pátele, neck and shoulder form a continuous swelling line, and there are two horizontal lugs set low down on the body (Fig. 12; Fig. 20, 7 = Fig. 25, 1).

In all the above types the handle may be rolled or flattened. Two 'split' handles (Fig. 27, 13, 14) probably belong to these jugs. Bases are always flat.

Type 2. Open bowls.

(a) Globular body with splaying rim: there are two vertically-pierced horizontal lugs on the shoulder (Fig. 13; Fig. 20, 2, 3; Fig. 23, A).

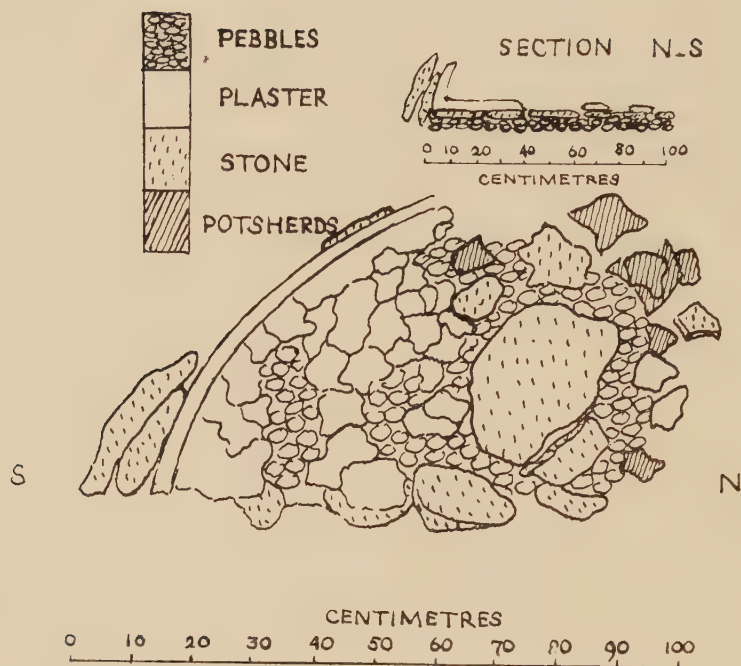


FIG. 7.—OVEN: SKETCH-PLAN AND SECTION.



FIG. 8.—VIEW OF OVEN.

(b) Same body, but the rim is not splayed. The lugs, similar to above, are set on the rim (Fig. 14; Pl. XIII b, 8, 9).

(c) Same body; the rim splays out and the lugs rise obliquely from it. They thus resemble the 'wish-bone' handles (Fig. 21, 12; Fig. 30, 9). The rims of these bowls are also protracted to form triangular lugs (Pl. XIII b, 4; Fig. 26, 1). The true 'wish-bone' handles probably belong to these bowls. They have blunt ends, round in section (Pl. XIII b, 11). In the reconstructed vase (Fig. 15), triangular lugs and 'wish-bone' handles are represented on the same bowl, as occurs in Central Macedonia.¹

(d) A fourth class conjectured from fragments has a slightly recurved rim with a broad flat top (Fig. 21, 7; Fig. 28, 5).

In Fig. 21, 1-10, are shewn rim-sections of various bowls, painted and plain.

Type 3. Tankards.

Deep tankards with two high-swung handles (Fig. 17 = Fig. 20, 1 and Fig. 23, c). The handles (Fig. 22 and Fig. 23, b) may belong to vases of this class.

The following shapes are less certain. The evidence for their reconstruction rests partly on fragments, and partly on the analogy of complete vases from Pátele.

Type 4. Jars.

(a) With conical neck, and four lugs at the point of junction between neck and shoulder (Fig. 16).

(b) With cylindrical neck and horizontal lugs on the shoulder (Fig. 18 and Fig. 30, 10, from Pátele). The rims of these jars are very varied (Fig. 21, 13-19).

Other shapes no doubt existed but cannot be reconstructed.

Miscellaneous.

Fragments of a large water-jar (Fig. 28, 2); the raised base of a small vase; a flat lid with a central knob (broken) (*ibid.* 3).

Decoration.

The paint, which is always matt, is, except in three cases (where there is a dull white slip (Fig. 27, 8)), apparently applied directly to the surface, as follows:

- black or brownish-black on the red vases;
- black, brownish-black, purple, or red on the buff;
- red or purple on the grey.

The designs are executed in firm unhesitating lines with a rather broad brush.

¹ Rey, *Les premiers habitats de la Macédoine* (= B.C.H. 41-43), Planche vii: B.S.A. xxvii. Pl. III (a). Cf. *Liverpool Annals*, xii. Pl. XVI, 3, for a similar type.

The style of decoration is rectilinear; the only curvilinear motive is a wavy band, and there is one doubtful example of a pot-hook spiral (Fig. 26, 5).

A definite system underlies the decoration.

In the case of jugs with cut-away necks (Type 1), the main decora-



FIG. 9.



FIG. 10.

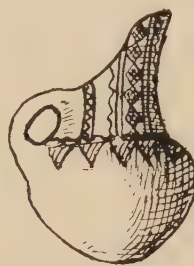


FIG. 11.



FIG. 12.



FIG. 13.



FIG. 14.



FIG. 15.

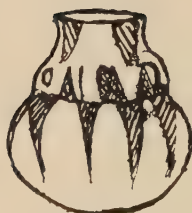


FIG. 16.



FIG. 17.



FIG. 18.

TYPES OF PAINTED POTTERY.

tion is concentrated on the throat; ¹ in the case of the jars with conical neck (Type 4 *a*) and the jars with cylindrical neck (Type 4 *b*), on the neck. In the last case the inside of the neck is also decorated (Fig. 27, 3). In all the above, the shoulder has usually nothing except pendent triangles,

¹ In jugs of Type 1 *d*, where neck and body coalesce, the decoration is carried down to the line of the handles (cf. Fig. 12). Pl. XIII *b*, 14, is probably from such a jug.

hatched, latticed, or closed, ending three-quarters of the way down the body. In the case of the bowls (Type 2), pendent, hatched, or latticed triangles on the outside are the rule; on the rim the same, the hatched and latticed triangles alternating and placed end to end (Fig. 23, A; Pl. XIII *b*, 1): sometimes a row of closed triangles is found. The rims



FIG. 19.—(= Fig. 20, 6) JUG WITH CUT-AWAY NECK, TYPE 1 *c*.
(Scale 1 : 2.)

of bowls of Type 2 *c* are more elaborately decorated (Fig. 26, 1, Pl. XIII *b*, 3, 4, 7): those of Type 2 *d* have key-patterns (Fig. 28, 5). The vertically-pierced lugs have almost invariably groups of lines radiating from the centre above and below (Fig. 21, 9, 11; Fig. 23A). The two-handled tankards (Type 3) were, to judge from the fragment (*ibid.* *c*), sometimes lavishly decorated on the body as well as on the neck and handles.

Very noticeable throughout is the careful spacing and the way in which the decoration emphasises the parts of the vase.

Fig. 24 illustrates the principal decorative motives. Far the most common are triangles, hatched, latticed, and closed; next, rows of lattice-lozenges enclosed in double or single bands, or in wavy lines; chequer patterns or lattice-chequers enclosed in a frame; lattice-lozenges enclosed

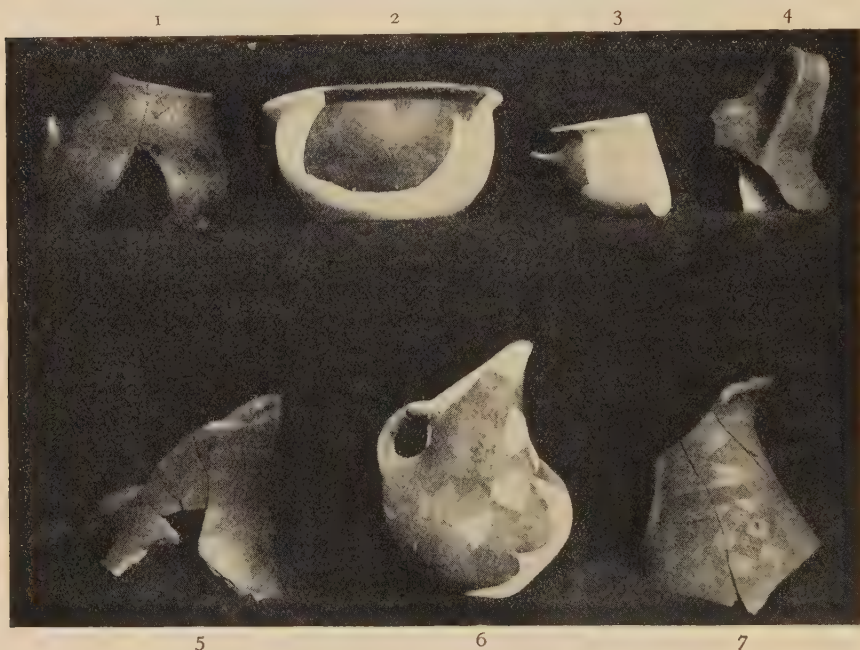


FIG. 20.—1, 4, TANKARDS, TYPE 3; 2, 3, BOWLS, TYPE 2 *a*; 5, 6, JUGS, TYPE 1 *c*; 7, JUG, TYPE 1 *d*. (Scale 1 : 5.)

in a lozenge-shaped frame (Fig. 26, 6). The Maltese cross, latticed or closed, occurs several times (Fig. 27, 5, 6, 10, 11). Lattice-squares or oblongs and ladders are very common, and are used to form key-patterns and meanders (Pl. XIII *a*, 2, 3, 4, 5). The row of lozenges ending in crossed hooks (Fig. 24) deserves notice, and the overshoot lines in the same motive.¹ Hooks attached to vertical bands or to triangles seem like rectilinear pot-hook spirals, and usually occur below handles (Fig. 26, 7, 8; Fig. 28, 1). There is one motive that looks like a stylised

¹ This motive decorates a long, vertical handle.

bird (Fig. 20, 7), and another may be a stylised tree (Pl. XIII a, 3; Fig. 26, 12).

Pottery, Plain.

The plain pottery, which is rare, does not differ in fabric from the painted. Recognisable shapes are—

(a) A bowl similar to Type 2 a, but with a higher and more splaying rim.

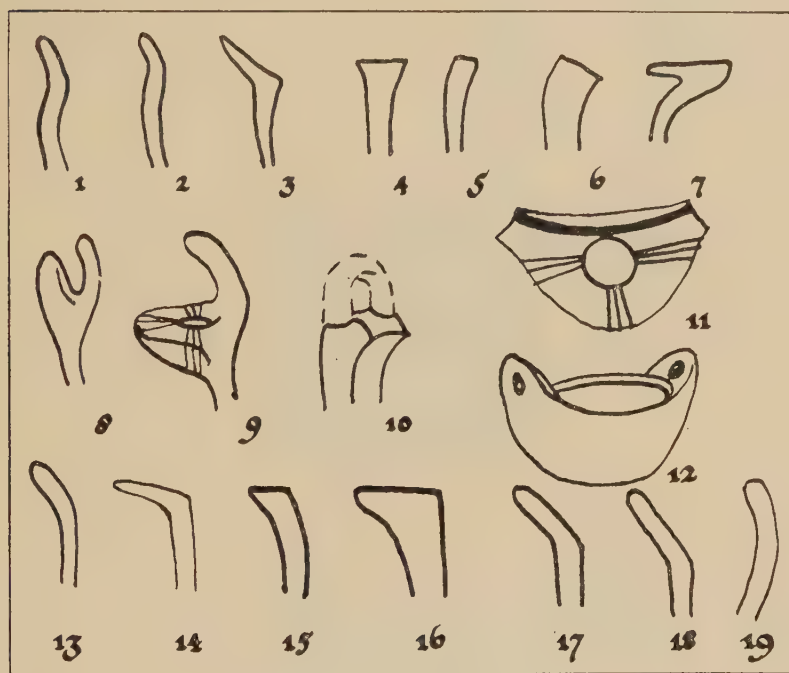


FIG. 21.—1-11, RIMS AND HANDLES OF BOWLS, TYPE 2; 13-19, RIMS OF JARS, TYPE 4.

(b) Large deep bowls, with loop-handles, imitations of the typical L.H. III. bowls¹ (Fig. 21, 8; Pl. XIII b, 2). Three specimens.

(c) Bowls with incurved rim, on which is an upright loop handle (Fig. 21, 10).

(d) Jugs with cut-away necks, as Type 1 b. Two specimens.

(e) A flat round dish, about 18 cm. in diameter, with a low rim, 5 cm. high, rising gradually to a broken edge.

¹ Cf. Blegen, *Korakou*, Fig. 85.

Miscellaneous.

A horizontal handle of which the ends were stuck through the wall of the vase (Fig. 27, 12).

Fragment of the rim of a bowl (?), with an impressed diagonal strip.

An incised fragment (Pl. XIII a, 8), probably from the shoulder of a jug.

Pottery, Coarse.

Coarse vases are rare. In addition to the pithos which enclosed the hearth, and the fragments associated with it, there are a few pithos fragments; some of which are decorated with impressed strips running in different directions, or in wavy bands.

Fragments of large cooking-pots with four (?) legs.

The base of a large vessel has the impress of a leaf upon it.

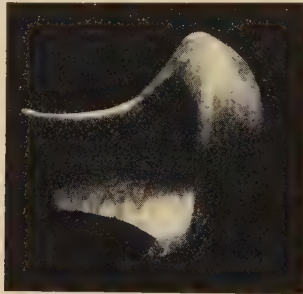


FIG. 22.—HANDLE OF TANKARD (?), TYPE 3.

Pottery, Imported sherds (Fig. 29).

One Mycenaean L.H. IIIb (*ibid.* 7); one Minyan (?) (*ibid.* 1); one Proto-Geometric sherd (*ibid.* 5); one Geometric sherd (*ibid.* 8); three indeterminate (*ibid.* 6, 7, 10).

Fig. 30 illustrates for comparison some vases, plain and painted, from Pátele.¹

(III) *Miscellaneous Terracotta objects* (Fig. 31).

Numerous reels (?), some blackened by fire ² (*ibid.* 1, 2):

A small object with perforations at each corner (*ibid.* 10).

Two lids (*ibid.* 5, 7); and several fragments of rectangular trays, perhaps griddles (*ibid.* 3).

¹ Cf. also Casson, *Macedonia, Thrace and Illyria*, Fig. 63. I have to thank Dr. Makridy Bey for permission to publish the Pátele vases.

² Or they may be supports for cooking-vessels or for the 'griddles.' Cf. Tsountas, Δ-Σ, Figs. 278, 9.

Two amulets (?) (*ibid.* 8, 9); the former perforated at each corner, the latter through the neck.

(IV) *Metal, Stone, Bone, etc.*

Bronze. A bronze pin, rectangular in section; near the head, a bulb, on either side of which are flutings (Fig. 29, 4).



FIG. 23.—A (= Fig. 20, 3) BOWL, TYPE 2 *a*. B, C (= Fig. 20, 4, 1) TANKARDS, TYPE 3. (Scale *ca.* 1 : 2.)

Iron. A socketed spear-head (*ibid.* 9).

Stone. A figurine (Fig. 31, 6); a perforated whetstone, rectangular in section (*ibid.* 11). Several rough whetstones, as *ibid.* 4.

Bone. A pommel with two perforations and a central depression (Fig. 29, 2).

C. CHRONOLOGY.

To determine the chronology one must naturally rely on two factors : outside contacts, and analogy with other sites.

The former are : (1) the Mycenaean sherd (Fig. 29, 3); (2) the pommel which has Mycenaean affinities (*ibid.* 2); (3) the bronze pin (*ibid.* 4); and (4) the Proto-Geometric and the Geometric sherd (*ibid.* 5, 8).

Of these, 1 and 2 point to a late Mycenaean (L.H. IIIb) date. That late Mycenaean objects reached the Haliákmon by trade is shewn by the sword from Grevená already mentioned. The bronze pin (3) is sub-Mycenaean, since it is of the type found in the sub-Mycenaean cemetery on Salamis,¹ and in Chamber Tomb III at Vrókastro,² and in Tomb A at Moulianá,³ both of which are sub-Mycenaean.⁴ Less precisely dated specimens come from the Argive Heraion,⁵ Aegina⁶ and Pherae.⁷ The position in which the pin was found—in a pocket in the virgin soil full of ashes, at a point where the deposit was 80 cm. deep—might suggest that it belongs to the earlier settlement, but too much significance should not be attached to this position, for two reasons. As a rare object, it may have been deliberately hidden. Secondly, it was not associated with fixed remains, apart from which, the stratified position of finds is, as has been seen, untrustworthy, and especially so in the case of small objects. Of the sherds (4), Fig. 29, 5, is Proto-Geometric; *ibid.* 8 belongs to the full Geometric period; *ibid.* 6, 7, 10 are indeterminate and may, on the analogy of similar sherds at Vardaróftsa, even belong to the Greek period.

On the evidence of outside contacts, therefore, the duration of the settlement must lie between 1300 and 900 B.C.—*i.e.* covering the end of the Bronze and the beginning of the Iron Age.

Evidence from analogy with other sites will appear in the following section (D), where the relationship of Bouboústi to other sites is discussed.

¹ *Ath. Mitt.* xxxv. p. 30, Abb. 10-11, 14.

² Hall, *Vrokastro*, Fig. 85, G-L.

³ Belonging to the sub-Mycenaean burial. *Ἐφ. Ἀρχ.*, 1904, p. 30, Fig. 7.

⁴ Cf. also two pins of this type from Grave 207 in the Kerameikos, *Ath. Mitt.* li., Beilage vi. 1.

⁵ Waldstein, *Argive Heraeum*, II, Pl. lxxviii. 89.

⁶ *Aegina, Heiligtum der Aphaia*, Tafel 114, 23, 24: a more elaborate type.

⁷ In the National Museum, Athens.



FIG. 25.—(= Fig. 20, 7, 5). JUGS WITH CUT-AWAY NECKS. 1, TYPE 1 *d*;
2, TYPE 1 *c*. (Scale 1 : 2.)



FIG. 26.—1, RIM OF BOWL, TYPE 2 *c*; 2, 4, 9, JUGS WITH CUT-AWAY NECKS,
TYPE 1 *b*, *c*; 3, HANDLE. (Scale 1 : 3.)

Here one may only note in passing that the entire absence of wheel-made local ware affords a strong presumption that the occupation did not last far into the Iron Age, since, in Central Macedonia, many plain and all painted local vases are made on the wheel when once the Iron Age has begun.

D. RELATIONSHIP TO OTHER SITES.

(1) *In the Bronze Age* (Fig. 32 and Pl. XIV).

Hand-made and painted pottery, with rectilinear decoration, similar to, but not identical with, the pottery from Bouboústi has turned up at all the excavated sites in Central Macedonia,¹ and has been found in recently-excavated mounds in Chalcidice.² It occurs at Lianokládi in the Spercheíos valley,³ and occasional sherds have been found at Tsanglí,⁴ Rini,⁵ and Sésκλο⁶ in Thessaly, at Orchomenos in Boeotia,⁷ and at Thermon in Aetolia.⁸ The matt-painted pottery from Lefkás may belong to the same family.⁹ Some characteristic decorative elements are shewn in Fig. 33.

Now this pottery, wherever it has been found in large quantities, is invariably associated with a certain kind of handle, sometimes attached to the matt-painted vases themselves, sometimes to unpainted bowls. This handle was called a 'wish-bone' handle by the English excavators in Thessaly. In its usual form it is a tall raking-handle of roughly triangular shape, but often with the end squared, set almost upright on the rim or the shoulder. In the present state of our evidence we must regard it as a Macedonian creation, because it was found in the earliest stratum at Vardaróftsa in Central Macedonia, along with its prototype (rounded handles with the rim protracted to a point).¹⁰ Since the first settlers at Vardaróftsa (coming from Anatolia)¹¹ brought the prototypes with them, and since the development into the true wish-bone handle

¹ = C2 ware. Cf. *B.S.A.* xxvii. p. 50, diagram.

² Molyvópyrgo, and Hagios Mámas, excavated by the British School, April, 1928. Cf. also *B.S.A.* xxvi. p. 32.

³ = Δβ1 ware. Wace and Thompson, *Prehistoric Thessaly*, pp. 180 ff.

⁴ *Ibid.* p. 113.

⁵ *Ibid.* p. 132.

⁶ A sherd in the collection of the British School at Athens.

⁷ Wace and Thompson, *op. cit.* p. 194, note 12, also Hagia Marina.

⁸ 'Αρχ. Δελτίον i. p. 264, Fig. 30, p. 265, Fig. 31.

⁹ Dörpfeld, *Alt-Ithaka*, Band II, Beilage 89 a, b. This pottery is, however, very fragmentary.

¹⁰ Cf. *B.S.A.* xxvii. Plate III (b).

¹¹ Cf. *ibid.* p. 54.

took place on Macedonian soil, and since the type is highly individual, we may regard it, wherever it occurs in North Greece, as the hall-mark of the Macedonians, and as a proof of their presence or of their passage (Fig. 32).

Thessaly (Pl. XIV, II). Apart from a very early example at Hagia Marina,¹ the first appearance of this handle outside Macedonia is in Thessaly in the 3rd Thessalian Period, the beginning of which is placed round about 2300 B.C.² It thus marks the earliest advance of these

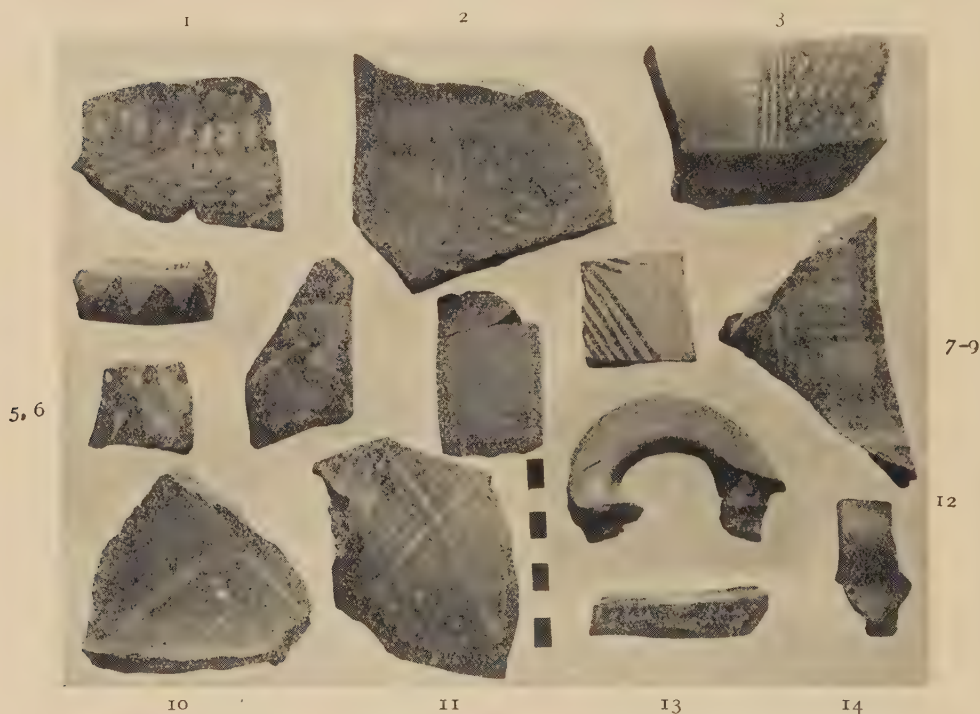


FIG. 27.—1-3, NECKS OF JARS, TYPES 4 *a*, 4 *b*; 8, SHERD WITH WHITE SLIP; 9, NECK OF JUG, TYPE I; 13, 14, 'SPLIT' HANDLES.

Macedonians southwards. Along with it are found jugs with cut-away necks, and askoi such as we know the Macedonians brought with them from Anatolia.³

¹ Cf. Frankfort, *Studies*, II, Pl. III. 3.

² Cf. Childe, *Aryans*, p. 59.

³ *B.S.A.* xxvii. p. 14. Some of the Thessalian Γ_3 wares are, in fact, indistinguishable from Macedonian Λ_1 wares. Cf. especially *Prehistoric Thessaly*, Fig. 86, *c*, *d* (from Tsáni), and cf. Γ_3 vases from Tsangli (*ibid.* Figs. 59, 60, 61), and from Zerélia (*ibid.* Figs. 101, 102,

Lianokládi. It is next found at Lianokládi (*ibid.* IV), in the Spercheios valley, associated with Minyan ware, and on these grounds may be assigned to the Middle Helladic period, *i.e.* some date between 2000 and 1600 B.C. Along with it appeared matt-painted pottery, exhibiting among strictly rectilinear elements the curious pot-hook spirals, usually placed by the handles.¹ This feature is also characteristic



FIG. 28.—5, RIM OF BOWL, TYPE 2 *d*; 3, LID. ALL EXCEPT 4 ARE BLACK ON RED. (Scale 1 : 3.)

of the matt-painted pottery of Central Macedonia (see below). From the presence of numerous 'wish-bone' handles at Lianokládi,² we infer that the Macedonians who had settled in Thessaly made a further move south-

¹ Cf. *Prehistoric Thessaly*, Figs. 125, 126, *c, g, h*.

² Cf. *ibid.* Fig. 134.

104*a*) with A1 wares from Vardaróftsa, *B.S.A.* xxvii. Pl. I, 1-5, Pl. II (*b*), and various shapes in Plate IV. In the collection of the British School at Athens are wish-bone handles from the following Thessalian mounds: 50, 60, 103 (cf. *Prehistoric Thessaly*, pp. 8-11). These sites are not shewn in Pl. XIV. For askoi from Macedonia, cf. *Antiquaries' Journal*, vi. Pl. VIII, Fig. 2, and *B.S.A.* xxvii. Pl. II (*a*).

wards. It was probably here that they first came in contact with Middle Helladic matt-painted ware and adopted the use of matt-paint to decorate their own pottery in their own way.¹

Lefkás. From the Choirospiliá cave on Lefkás come 'wish-bone' handles closely resembling in form and fabric those from Lianokládi,



FIG. 29.—MISCELLANEOUS OBJECTS. 1, MINYAN (?) SHERD; 3, MYCENAEAN; 5, PROTO-GEOMETRIC; 8, GEOMETRIC.

and associated with matt-painted pottery, shewing the latticed triangles characteristic of the North Greek style.²

Central Macedonia (*ibid.* V.). In Central Macedonia the 3rd Period begins about 1650 B.C.³ It is the great period of the 'wish-bone' handle. It is also characterised by what one may call a recrudescence of Anatolianism. Jugs with cut-away necks in light-faced fabrics become common.

¹ Cf. *B.S.A.* xxvii. p. 57.

² It is scarcely possible to decide whether this pottery belongs to the North Greek or the South Greek matt-painted class. The wish-bone handles are not illustrated.

³ Cf. *B.S.A.* xxvii. p. 63.

Matt-painted ware makes its appearance which, while it seems to have acquired the use of paint and improved fabric from contact with the south, preserves local shapes (developments of earlier forms), and a traditional style of decoration (also, as I believe, Anatolian). The pot-hook spiral, either isolated or attached to triangles, as at Lianokládi, is very common.¹ A secondary feature which the two areas have in common is a painted cross on the base of the vases. In Central Macedonia the hand-made matt-painted pottery dies out at the end of the Bronze Age.



FIG. 30.—VASES FROM PÁTELE. (Scale 1:3.)

In Pl. XIV, V are included contemporary vases, plain or incised. Note the gourd-like bowl with pointed handle (1) (*ibid.* VI, 2), which occurs again at Thermon,² and in Lefkás,³ and the decoration of the jug with cut-away neck (8) which closely resembles jugs from Bouboústi.

Thermon. *Ibid.* VI shews a group of vases from the well-known site of Thermon in Aetolia, at the very south of the Pindus range. The affinity of the pottery with that which we have just seen from Macedonia is striking. The bowls with wish-bone handles, the gourd-like bowl with

¹ Cf. *B.S.A.* xxvii. p. 21, Fig. 9 and p. 60, Fig. 40.

² Cf. *Ἀρχ. Δελτίον*, 2, p. 185, Fig. 8.

³ Cf. *Alt-Ithaka*, Band II, Beilage 72, 6.

pointed handles, the jugs with cut-away neck, are Macedonian types. Associated with these at Thermon is matt-painted ware, like but not identical with that from Lianokládi. Compare the large water-jars in brick-red clay from either site. The spirit of the decoration is that of the North Greek rather than of the Helladic matt-painted style. We conclude that another group of the Macedonians who had settled in Thessaly found their way to Thermon. Fortunately the date of the

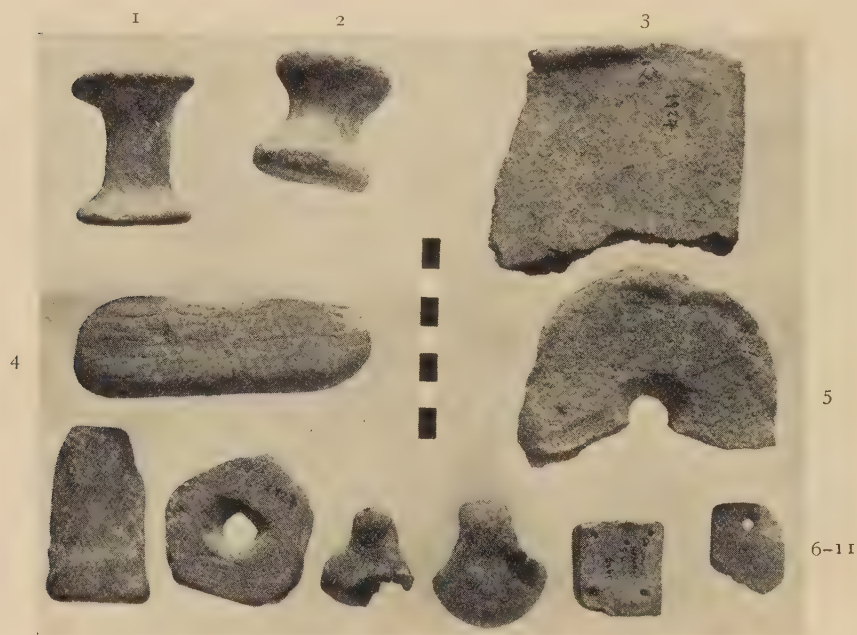


FIG. 31.—MISCELLANEOUS TERRACOTTA OBJECTS. 4 IS OF STONE.

settlement is known : it belongs to the Late Helladic I and II Periods, *i.e.* about 1600 to 1400 B.C.

Vólo. By the side of the Lianokládi pottery is placed an interesting matt-painted vase from near Vólo (*ibid.* IV, 4). Its context is uncertain, but a grave containing local imitation of L.H. II pottery was found in the immediate neighbourhood.¹ It is included here because, typologically and geographically, it is intermediate between Lianokládi and Bouboústi. It also has a painted cross on the base, and we may note the motive of lattice-lozenges within a frame, which is found at Bouboústi.

¹ Cf. *Ath. Mitt.* xiv. pp. 262 ff., Tafel xj. 8, 8a, 8b.

Bouboústi. We next come to Bouboústi itself (*ibid.* VII).¹ Technically the pottery stands in most close relationship to Central Macedonian. The quality of the vases is better than at Lianokládi or Thermon, the execution of the decoration more careful. The smooth-polished buff or yellow surface and the purple or reddish paint are all reminiscent of Central Macedonia. With regard to shapes, the jug with cut-away neck (Type 1) and the jar with conical neck (Type 4) are common in both areas: the way in which the rims of bowls are pinched out (Pl. XIII *b*, 4) is a characteristic Central Macedonian device;² and the rounded horizontal lugs with vertical hole (Fig. 23, A) are of the shape familiar in Central Macedonia from the earliest period.³ There is, as we saw, only one example, and that doubtful, of a pot-hook spiral, but several geometrised versions of it, also placed below the handles, as at Lianokládi and in Central Macedonia. The use of pendent triangles on the shoulder⁴ and of hatched triangles placed along the rim is thoroughly Central Macedonian:⁵ while the meander had already appeared in incised pottery there some centuries earlier.⁶ Thus, in spite of divergencies, the painted pottery as a whole, technically and artistically, stands in closer relationship to that of Central Macedonia than to that of the other sites.

But while the resemblances are great, the divergencies are sufficiently great to make us doubt whether this style derives *directly* from Central Macedonia. Almost certainly there was an intermediate station. As in the case of Lianokládi and Thermon, this intermediate station may have been Thessaly. But, wherever it was, the makers of this pottery must have separated sufficiently long from the parent stock to develop a highly individual and elaborate style, in which the pot-hook spiral has become geometrised and the wish-bone handle a rarity. It is, of course, possible that they are the Lianokládi folk in a later stage of their wanderings. The Vólo jug would then be a link between the earlier and the later stages, and the use of black-on-red technique, unknown in Central Macedonia, would be explained.

It has become clear in the course of the inquiry that we have to do with pottery of common family, originating in Central Macedonia, with a secondary centre of dispersion in Thessaly, from which it penetrated

¹ Vases from Pátele are included.

² Cf. p. 169.

³ Cf. *B.S.A.* xxvii. Pl. I, 3.

⁴ The jug from Kilindir provides a specially close parallel. *Ant. Journal*, vi. Pl. XV, 2.

⁵ Cf. *B.S.A.* xxvii. p. 21, Fig. 9.

⁶ Cf. *ibid.* Pl. XII (a), 2.



FIG. 32.—MAP OF N. GREECE SHEWING DISTRIBUTION OF 'WISH-BONE' HANDLE AND N. GREEK MATT-PAINTED POTTERY OF THE BRONZE AGE.

X 'Wish-bone' Handle.

▲ N. Greek Matt-painted Pottery.

1. Central Macedonia and Chalcidice.
2. H. Marina (also ▲).
3. Thessaly.
4. Lianokládi.
5. Orchomenos.

6. Thermon.
7. Bouboústi.
8. Pátele.
9. Lefkás.

south to the Spercheios valley, and south-east into Aetolia and Lefkás, while a third group (Bouboústi), from an unknown intermediate station or stations, is found in Western Macedonia at a somewhat later date. Since, outside Central Macedonia, the occupation of the sites where it is found begins and ends suddenly, we infer that, unlike their relatives in Central Macedonia, the makers of this pottery had adopted a nomadic or semi-nomadic life. Once committed to a nomadic existence, these groups would have formed tribes, and would move about, each in a fairly well delimited area, partly mountain, partly plain, with winter and summer encampments and perhaps a central point of reunion. We may conjecture that the area of the Lianokládi group was East Thessaly, from Vólo to Orchomenos in Boeotia, to judge by the places where their characteristic ware has been collected. Similarly, Thermon would be the centre of a tribe that moved about in South Pindus, and wandered as far as Lefkás; while the limits of the Bouboústi folk would seem to be Central Pindus, and the adjacent valleys from Lake Ostrovo to Mount Olympus. Meanwhile, in Central Macedonia the parent stock retained their settled habits, and continued to occupy the same sites uninterruptedly for centuries.

The character of the decoration, distinctive elements like the pot-hook spiral,¹ the wish-bone handle, the jug with cut-away neck, and other shapes, prove conclusively that in spite of local differences a common tradition and a common artistic mentality animates and unites the whole.

Anatolia. It is not possible here to consider the relationship of this North Greek matt-painted pottery with that which is known from Anatolia: I mean from Cappadocia and Hittite sites in the late Bronze Age, though the existence of some relationship is obvious. Fig. 33 shews some typical 'Hittite' patterns compared with ours; and we may note in both areas the pot-hook spiral attached to triangles, the chain of lattice-lozenges, the lozenges within a lozenge-shaped frame, the Maltese cross, and the ladder patterns, and that the true pot-hook spiral and its rectilinear version are in Cappadocia found on the same vase.² There also jugs with cut-away necks are common. The resemblance need not surprise us: for the matt-painted pottery of Macedonia derives from earlier local incised wares, and these have their roots in Anatolia.³ Thus,

¹ The pot-hook spiral does, of course, occur in South Greek matt-painted pottery; cf. Goldman, *Excavations at Eutresis*, Fig. 41, 8; but it is very rare.

² Cf. de Genouillac, *Céramique Cappadocienne*, II. Pls. 23, 23 bis; Frankfort, *Studies*, II, Pls. IX, X, XII, Figs. 16, 17, 19, 20.

³ Cf. *B.S.A.* xxvii. p. 57.

while the common elements *may* be due to a Macedonian immigration into Anatolia, as has been recently suggested,¹ they may equally well be explained as due to a parallel development on both sides of the Aegean, quickened no doubt by renewed intercourse.²

(2) *In the Transitional Period and Early Iron Age.*

Central Macedonia (Pl. XIV, VIII). Leaving then aside this interesting field of inquiry we must return to Greece, and ask whether we can follow into the Transitional Period, and into the Iron Age itself, the tracks of these makers of North Greek painted pottery. Now, whereas at Lianokládi and Thermon (in the one case because the site was abandoned, and in the other because it was Mycenaeanised) this pottery disappears, in Central Macedonia it continues until the end of the Bronze Age, when it is succeeded by a wheel-made variety with roughly-executed patterns among which is the concentric circle.³ The wish-bone handle is now applied to smaller bowls, and is placed horizontally on the rim.⁴ The jug with cut-away neck, still hand-made, becomes extremely common, and has acquired a fluted or twisted handle.⁵ Nearly all the Iron Age types of Central Macedonia are, in fact, descended from Bronze Age prototypes, but have undergone a change in the period of Transition. It was in this period that Central Macedonia was invaded by people from Banat, whose ceramic remains (chiefly fluted pottery) are found in burnt strata at the top of the Mycenaean deposits at Vardaróftsa and Várdino.⁶ This invasion caused a partial displacement of the inhabitants, who, however, subsequently returned; and the changes we have noted in the pottery of the succeeding period (which is that of Macedonians who had returned after the invaders had passed) may be attributed to this upheaval.⁷

Thessaly (*ibid.* IX). It is this displacement of Macedonian tribes by Northern invaders which also explains Thessalian pottery of the Transitional and Early Iron Age. We have already seen that Macedonians

¹ Cf. Frankfort, *Studies*, II, p. 171.

² The 'recrudescence of Anatolianism' at the beginning of Period C in Central Macedonia (*ca.* 1650 B.C.) points in this direction. Cf. pp. 182 f., and *B.S.A. loc. cit.*, p. 59.

³ = D 4 ware, cf. *B.S.A.* xxvii. p. 28.

⁴ = A 17 ware, cf. *ibid.* p. 26.

⁵ = cf. *ibid. loc. cit.*

⁶ Cf. *ibid.* pp. 23, 59. Prof. Childe kindly pointed out the affinity. I have since seen numerous specimens of identical ware in the Museum of Pančevo. Cf. Childe, *Mannus*, vi. pp. 237, 8.

⁷ Cf. *B.S.A.* xxvii. p. 61.

CENTRAL & WESTERN
LIANOGLADHI, THERMON, VOLO • MACEDONIA • CAPPADOCIA

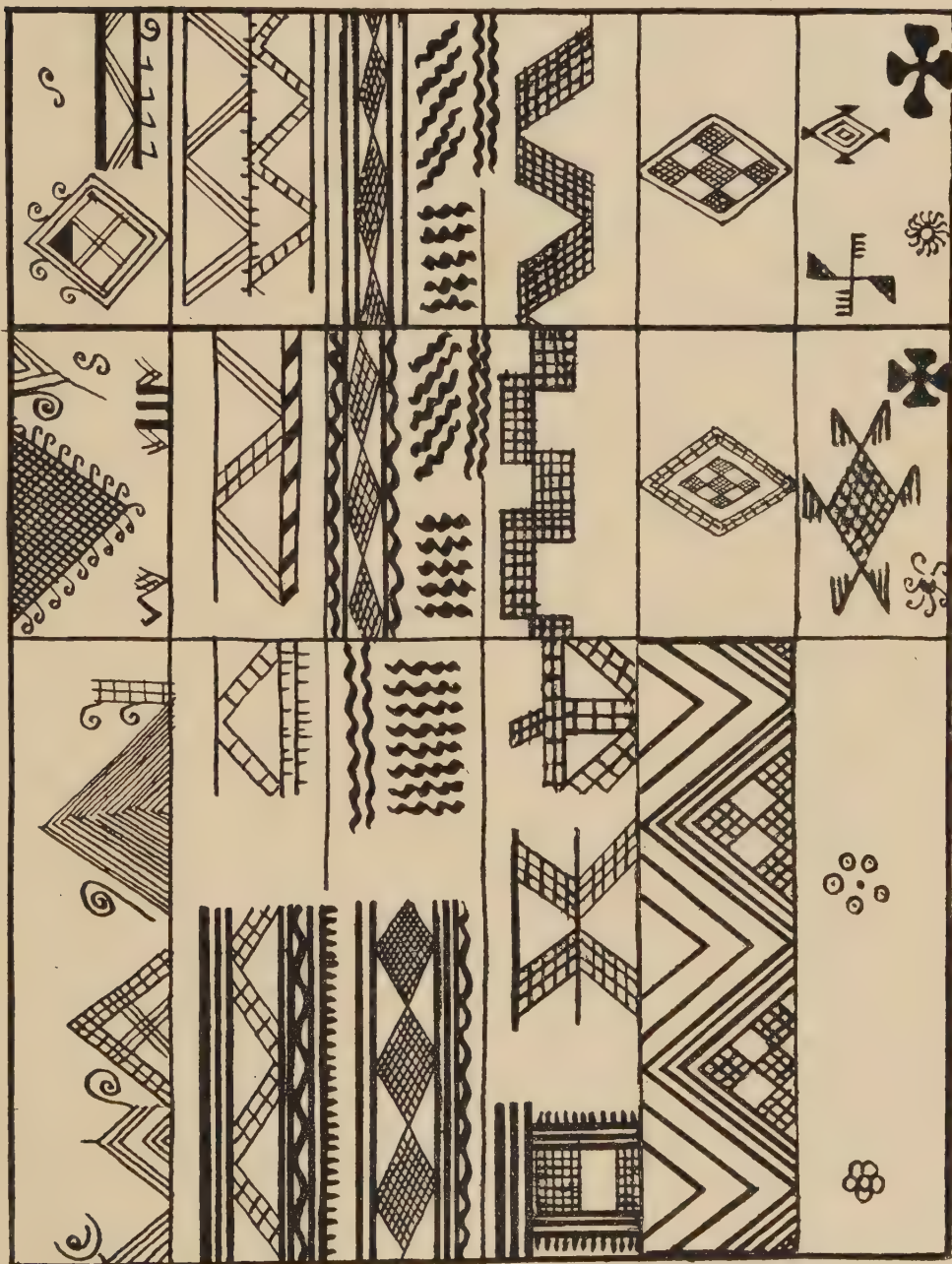


FIG. 33.—PATTERNS ON POTTERY.

had passed into Thessaly at an earlier date, and it is their pottery which forms the substratum of the new style which now arose, compounded of diverse elements. A group of this new pottery partly from *tholos* tombs at Marmáriani, partly from tombs near Vólo, shews the elements which have gone to its making. They are these.

The original Anatolian-Macedonian substratum is represented by the askos, the askoid jug (*ibid.* 1, 12), the plain jugs with sloping or cut-away necks (*ibid.* 2, 13),¹ and the bowl with upright handles (*ibid.* 6).² The Mycenaean settlements in Thessaly have left traces of their influence in the use of lustrous paint, in the reserved bands (*ibid.* 4, 10), in the shape of the numerous open bowls with loop handles (not here illustrated).³ The numerous jugs with cut-away necks with incision on the shoulder (*ibid.* 7) and twisted handles, the bowls with horizontal wish-bone handles (*ibid.* 9), the bowls with pinched-out ribbon handles (*ibid.* 11), and the 'trigger' handle (*ibid.* 3) are identical with Central Macedonian types of the Early Iron Age, most of which were already beginning to appear in the Transitional period.

But there is yet another element in the Thessalian Geometric style. The painted jugs with cut-away necks (*ibid.* 4, 8, 10), the askos (*ibid.* 1), and the askoid jug (*ibid.* 12) have in their decoration close affinities with Bouboústi: the key pattern, the chequer patterns, the vertical rows of lozenges, enclosed in wavy lines, the rows of closed triangles, and the way in which these patterns are concentrated on the neck of the jugs are closely paralleled at Bouboústi, and nowhere else.

The inference is that the Thessalian Geometric style can have arisen only as the result of a concentration in Thessaly of Central and West Macedonian elements, acting upon an earlier Anatolian-Macedonian substratum, which had been lately subjected to Mycenaean influences.

Stratigraphic evidence at Vardaróftsa shews that the Northern invaders reached Macedonia about 1150 B.C., and that the main body of Macedonians had arrived in Thessaly by 1050 B.C.⁴ The concentration in Thessaly may then have been spread over 100 years or more, and there is reason for thinking that the invaders themselves may have taken part in the closing stages of it.⁵ The Haliákmon tribe, who probably moved

¹ Especially 2, with its twin projections.

² Derived from the wish-bone handles.

³ Cf. *Antiquaries' Journal*, vii. Pl. XV, Fig. 25.

⁴ Cf. *ibid.* pp. 56, 57.

⁵ Cf. *ibid.* p. 56.

in sympathy rather than as a result of direct pressure from the invaders, were among the first arrivals.

Pátele. The position of Pátele now becomes clear. Its close affinity with Bouboústi is unmistakable;¹ but the marked falling-off in the execution of the painted vases and the presence of several wheel-made vases indicate that the cemetery came into use during the later period at Bouboústi. It seems probable that the people of the second settlement at Pátele may belong to members of the tribe who were left behind and later moved northwards. That they re-established relations with Central Macedonia is clear from the number of hand-made monochrome jugs (frequently incised on the shoulder) at Pátele, which are also typical of Central Macedonia from the beginning of the Iron Age. The fibula-types shew that the cemetery continued in use until the eighth century.²

In Pl. XIV an attempt is made to shew the genealogy of the Thessalian Geometric style and the interrelation of the various sites.

E. DORIANS AND MACEDONIANS.

We have now brought our Bouboústi people into Thessaly at the very end of the Bronze Age, and have identified their contribution to the Thessalian Geometric style. But the question may be asked: Is it possible to attach a label to these people? Racially, they must have been Anatolian in the same sense as their kinsmen in Central Macedonia, who were the descendants of Anatolian settlers, and whose racial strain, in view of their secluded history, need not have been seriously modified by their long residence in Europe. Traces of Northern influence are, on the whole, rare in Central Macedonian pottery, and soon disappear, while the Anatolian element, if anything, gets stronger. But if racially Anatolian, linguistically they may well have been Greek. Recent excavations³ have shewn that, starting with Neolithic times, Macedonia followed much the same course of development as Greece, except that it received no direct influence from Crete. It was, in fact, from first to last an outlying, if secluded, province of the Aegean. Consequently, from whatever source the Greek language arose in Greece, Macedonia may

¹ Cf. Fig. 30.

² Cf. Blinkenberg, *Fibules grecques et orientales*, p. 136. Type VII, 6c. Spectacle fibulae were also found.

³ In Chalcidice, 1928.

have obtained it from that source. A leading authority says of the Macedonian speech, 'as far as we can judge from the scanty remains, it is a form of Greek, but detached at such an early period that it is best not classed as one of the Greek dialects in the ordinary sense. Yet it shews some notable points of agreement with the neighbouring Thessalian.'¹

Herodotus, in a famous passage,² speaking of the Dorians, says that they first appear in Phthiotis in the time of Deucalion. From there they moved to the region under Olympus and Ossa (*i.e.* North Thessaly), thence, to Macedonia, where they bore, he says, the Makedonian name. Finally they returned south, and Doris was their final halting-place before they crossed into the Peloponnese. Other writers say that their final halting-place was North Thessaly, while in Homer they are already settled in Crete.

Modern scholars, collating the literary and the linguistic evidence, have, not however unanimously,³ agreed that the Dorians were a nomad tribe who, as one writer picturesquely puts it, 'moved up and down the spine of Pindus,'⁴ that they assembled in North Thessaly before moving southwards, that the appearance of the Geometric style with its rectilinear motives, especially the meander, is in some way connected with their arrival in Greece, that they introduced weapons of iron, and finally, that they were already Greek-speaking.

Let us resume and set side by side with this the purely archaeological evidence which we have been studying. The archaeological evidence indicates that people of Macedonian-Anatolian stock left their homes in Macedonia about 2300 B.C. and moved southward, first into Thessaly, where they split up into groups and tribes, one occupying East Thessaly and the Spercheios valley, and another S. Pindus and Aetolia, while a nucleus remained in Thessaly. Later, what seems to be another tribe of the same family appears in the Haliakmon valley at Bouboústi in the foothills of Pindus (though there is some evidence that these were an

¹ Buck, *Greek Dialects* (1910), p. 288, and E. Meyer, *Gesch. des Altertums*, Band II (1928), p. 273: '... aber im allgemeinen dem Dorischen nahestand,' and of their nationality the same writer says, *ibid.* p. 274: '... so kann doch kein Zweifel sein dass die Makedonen ... ein Zweig des griechischen Volkstums gewesen sind.' Cf. also Tarn, *Antigonos Gonatas*, pp. 175-181.

² Herodotus, i. 56.

³ Exceptions are K. J. Beloch and Max Neubert, *Die Dorische Wanderung*.

⁴ Wade-Gery in *Cambridge Ancient History*, Vol. II. p. 530.

earlier group in the later phase of their wanderings). Finally, at the end of the Bronze Age, these tribes reappear in North Thessaly and around Vólo, along with a further wave of Central Macedonians (accompanied by a few Northerners who had invaded Macedonia some fifty years before). We have seen that there is no reason why they should not have already possessed the Greek language, and they certainly used weapons of iron; while the meander was the common property (in the one case incised, in the other painted) of both the Western and Central Macedonian contingents. Moreover, it is actually in Eastern Crete that the most distinctive decorative elements of the Thessalian Geometric style find their closest analogies.¹

Thus the general agreement both in time and place between the archaeological evidence on the one hand, and the statements of ancient authors and the conclusions of modern scholars on the other, is remarkable. It is true that Herodotus describes them as moving about as a single unit, while we have agreed to see two, and perhaps three, moving in separate areas. It is also true that he says they start in Phthiotis, and that their final halt was in Doris.

It must be remembered, however, that Herodotus says nothing about where they came from before they reached Phthiotis, and that other writers *do* place the final halt in North Thessaly. Allowing for inaccuracy in detail on the part of Herodotus, and for the incompleteness of the archaeological evidence, we are forced to ask the question: Can we identify this southward movement of Macedonian tribes, to which the archaeological evidence points, with the Dorian invasion or, at least, its eastern wing?

While the archaeological evidence would admit an affirmative answer, objections may be advanced from the side of philology, ethnology, or history. These it is beyond the writer's competence to discuss. The case for identifying the makers of the North Greek pottery with the Dorians would, no doubt, be strengthened if similar pottery were forthcoming from Epirus and in general from the western side of Pindus, in which region there seems to be at present a desire among scholars to locate, on philological grounds, the Dorian home. So far, Lefkás is

¹ Cf. Hall, *Excavations in Eastern Crete*, *Vrókastro* Pl. XXVII, 2, Pl. XXIX, 2, Pl. XXX, Pl. XXXII, 1, from the Chamber Tombs; Fig. 50, E, H, 'quasi-Geometric,' from the Town (note the pot-hook spiral attached to a latticed triangle in H); Fig. 52, 'mature Geometric' from the Town. Cf. also *Prehistoric Thessaly*, p. 255.

the only Western locality which has produced it. Thermon holds a central position. It must be remembered, however, that sites occupied by nomad people are less easily discovered than those which have been continuously occupied by people of settled habits. Bouboústi was found by chance. It is likely that both in Epirus and Acarnania similar sites exist and will some day be discovered.

But even if the identification of the Dorian invasion with movements of Macedonian-Thessalian tribes should prove untenable, because the archaeological and other evidence is found not to cohere, certain points have emerged from the study of the pottery. First, that the culture of the 3rd Thessalian Period is largely an extension into Thessaly of an earlier Macedonian culture (Anatolian by origin);¹ next, that this culture, pushing south, came into contact with outposts of the Middle Helladic culture (itself partly Anatolian), and adopted from it the use of matt-paint, as a result of which arose in North Greece a matt-painted style distinct from that of the South. Finally, we have seen that towards the end of the Bronze Age, as the result of the concentration in North Thessaly of Thessalian-Macedonian tribes, set in motion by the arrival of Danubian invaders in Macedonia, was formed what was perhaps the earliest of the true Geometric styles of Greece. The study, as it were at close quarters, of this style, the identification of its component elements, the tracing of its genealogy, may perhaps throw some light on the history of other, later and more distinguished Geometric styles in the South.

W. A. HEURTLEY.

¹ I had formed this opinion before reading Prof. Childe's *Aryans*, where a similar view is expressed (p. 59). Prof. Childe over-estimates, I think, the Balkan character of the Macedonian pottery which appears in Thessaly at this time.

REPORT ON EXCAVATIONS AT THE TOUMBA AND TABLES OF VARDARÓFTSA, MACE- DONIA, 1925, 1926.

PART I. (*B.S.A.* xxvii. pp. 1-66).

Corrigenda and Addenda.

P. 7, Fig. 6. Pit D } *should read* Pit D.¹
B }

P. 21, Fig. 10. *For* Period D *read* Period C.

P. 41, Fig. 26 is a Sketch; Figs. 27, 28 are Plans.

Pl. VIII, *a, b.* Scale *ca.* 1 : 5.

Pl. XI, *b.* *For* 1 : 6 *read ca.* 1 : 2.

Addenda, p. 39.

CHEMICAL ANALYSIS OF METAL REMAINS.

[The task of analysing specimens of metal and slag from the Toumba has been most kindly undertaken by Mr. O. Davies, student of the School. Facilities for making the analyses, placed at Mr. Davies' disposal by Sir Charles Martin and Professor Harden of the Lister Institute, are hereby gratefully acknowledged. The following is an extract from Mr. Davies' report.]

Analysis of Metal.

Period A. Fragments of a pin in Settlement 5 (S. 30 (1)).²

Sn	22.28
Sb	5.8
Cu	46.27
Pb	13.91
Fe	3.18
Zn	Tr.
Ni	7.09
Bi	.89

99.42

¹ A corrected version of the plan appears on p. 202.

² P. 9. Cf. p. 11, note 1.

Period B. Fragment of a pin in Settlement 7 (S. 28 (2)).

	Percentage.	Scaled to 100.
Sn	3.37	3.67
Cu	86.26	93.94
Fe	.82	.89
Ni	Tr.	Tr.
Bi	1.38	1.5
	91.83	

This bronze was also tested for Zn, Sb and Pb, which did not appear.

Period C. Fragment of a blade in Settlement 10 (IX. 22 (1)).

	Percentage.	Scaled to 100.
SiO ₂	25.52	—
Sb	3.54	7.28
Pb	.79	1.63
Cu	25.93	53.26
Fe	11.93	24.5
Zn	Tr.	Tr.
Ni	6.49	13.33
	74.20	

Fragment of a blade in Settlement 11 (IX. 20 (1)).

	Percentage.	Scaled to 100.
Sn	2.14	2.41
Sb	.4	.45
Pb	Tr.	Tr.
Cu	78.96	89.15
Bi	3.09	3.49
Ni	1.07	1.21
Fe	.94	1.06
Zn	1.98	2.23
	88.58	

All these pieces were of the same character; there should be especially noticed the presence of Bi and Ni, in some cases in considerable quantities. (Bi was not tested for in the fragment from Settlement 10.) This points to their all having come from the same mine, which clearly contained a very mixed ore. The figures in the fragment from Settlement 10 (Period C) are especially remarkable. It looks as if a very poor ore was being worked, either when the mine was first started, or when it was nearly worked out. I know

of no bronzes with so high a nickel percentage, except in S. Africa, but nickel sometimes forms a green ore which may easily be mistaken for copper.

Analysis of slag: Gold.

Period A. In Settlement 1 (S. 35).

This sample contained small quantities of Fe_2O_3 and traces of Au. It also contained some red substance which may be Cu_2O . I think it is a gold slag.

In Settlement 5 (S. 30 (2)).

Under the microscope this piece shewed mainly white SiO_2 , some traces of Fe_2O_3 , and some black particles. It was tested for Cu, Ni, Pb, which did not appear. It contained 33% iron, which is far too little for an iron slag. Though no traces of gold were found, its general appearance connects it strongly with the other gold slags.

Period C. In Settlement 16 (VI. 10 (1)).

This slag was rather brittle. Under the microscope it contained small quantities of Fe and Au, and so was probably a gold slag.

Period D. In Settlement 18 (II. 7 (1)).

This piece contained small traces of Au, when examined under the microscope, and so is probably a gold slag.

In Settlement 20 (VI. 5).

Shewed mainly black particles with occasional bits of white SiO_2 and traces of Fe_2O_3 . It was very friable when crushed. Possibly a gold slag.

Iron.

Period C. In Settlement 10 (IX. 21 (2)).

Composed of white and black crystalline particles, with some yellow stains. The standardised percentages were—

SiO_2	68.67
$\text{Fe}_2\text{O}_3 + \text{Al}_2\text{O}_3$	6.37
CaO	22.66
MgO	2.31

This shews a very good iron slag, from which most of the iron has been extracted.

Period D. In Settlement 20 (IV. 4).

This piece was more granulated: it was mainly composed of Fe_2SiO_4 , but small particles of SiO_2 and some free Fe_2O_3 shewed a very low temperature slag, as ferrous silicate forms very easily. The quantity

of iron present also shews a low temperature and a lack of skill in metal working. The standardised percentages were—

SiO ₂	35.56
CaO	7.66
Fe ₂ O ₃	52.16
Al ₂ O ₃	4.12
MgO	.51

The levels at which the two pieces of iron slag were found and the percentages of iron contained in them throw an entirely new light on the early history of iron. In the early iron age, a malleable iron or a mild steel was extracted directly from the ore at a temperature of about 800°; but at this temperature 30–40% of the iron would remain in the slag combined with the silica, and the iron would not be fused.

Now in ancient times copper was extracted from its ore by fusing it at about 1500°, and then cast; it has so far been a mystery how the completely different process of working iron was invented. But the piece of slag found in Settlement 10 provides a missing link; the low percentage of iron here makes it absolutely certain that the iron was fused when smelted, and then presumably cast; in other words, it was treated just as copper was. But this method of working gives an iron which is quite useless for ordinary purposes, as it contains a high percentage of carbon and is extremely brittle; thus it was that iron was not used for ordinary tools when it was first discovered.

Now it seems generally admitted that the method of extracting malleable iron or steel from the ore comes from north-eastern Asia Minor, whence it was brought into Hungary round the north side of the Black Sea; but here is evidence to shew, as Frankfort suggests, that there was a migration from Macedonia into Asia Minor. These people then took with them the knowledge of casting iron; in Asia they discovered the much more serviceable but more wasteful malleable iron,¹ which was then transmitted round the Black Sea and brought down again into Macedonia at the beginning of the iron age. The type of slag from such workings is that of the second piece analysed, from Settlement 20.

O. DAVIES.

From the above analyses it appears that towards the end of Period A (*i.e.* not long after the rise of Troy, II), objects of more or less standard bronze were being used in Central Macedonia. Bronze appears at Troy about this time; it is not, therefore, remarkable that it should appear in Macedonia also, whose culture stands in close relation to that of Troy throughout Period A. Since copper is known to exist in Macedonia, it is possible that the bronze objects were made on the spot, the tin being imported. That this tin was imported from the South is a fair inference from the inferior quality of the

¹ Cf. malleable iron slag from Boz Euyuk, Olshausen, *Z. F. Ethn.*, 1907, p. 691.

bronze specimen of the next Period (B), during which, as we know from the pottery, Macedonian relations with the Aegean were interrupted. The deficiency in tin of the specimens from the earlier half of Period C can be similarly explained, since, although indirect contact is inferred (from the pottery) for the earlier half, *direct* trade relations were re-established only with the arrival of Mycenaean in the latter half of the Period.

It is significant that the piece of slag pronounced by Mr. Davies to be a good iron slag occurs in association with the earliest Mycenaean sherds. It suggests that one of the inducements which brought Mycenaean traders to Vardaróftsa was to obtain this still rare and precious metal, and that the source of the iron in the rings from Vaphio, Kakovatos-Pylos and Mycenae, though of an earlier date, may have been Macedonia. It is also significant that the renewal of intercourse between Macedonia and Anatolia, which, to judge from the pottery, occurred early in Period C, coincides with the appearance of iron weapons in the latter region, and it may well be that the knowledge of iron-working in both areas was the result of this intercourse, though from which direction it started we can at present only conjecture.¹

To judge from the various levels at which gold slag occurs, it seems that gold was worked from the time of the earliest settlement almost to the last, and that it was gold which attracted the Anatolians seems certain, since one of the pieces of slag was found actually on virgin soil. It may or may not be chance that none appears in Period B, when, as we saw, relations with the Aegean were suspended, and Macedonian culture was at its lowest ebb. The specimen from the burnt layer, at the end of Period C is interesting, for it was at this time that Northern invaders and Mycenaean traders lived for a short time side by side on the Vardaróftsa mound.

Thus from these remains, copper, bronze, gold and iron, we have tangible evidence that it was the mineral wealth of Macedonia that attracted successive exploiters—Anatolians, Mycenaean and lastly Greeks. Of these only the first obtained a firm footing, penetrated into the interior and became a preponderating element in the population. The two Northern incursions (at the beginning of Period B and the end of Period C respectively) seem to have been of a different character from the Southern.

Addenda, p. 45.

V. VEGETABLE REMAINS, CEREALS, ETC.²

Period A. Acorn, wild vetch, wheat, and a well-marked seed (not a cereal) which cannot yet be determined.

Period B. Acorn.

Period C. Wheat, and a kind of lentil, not determined.

¹ Cf., however, Mr. Davies' remarks above.

² For the identification we are indebted to the kindness of the Director of the Natural History Museum, South Kensington.

The following trees have been identified, either from fragments or from impressions on lumps of clay.

Period B. Either willow or poplar.

Period C. Oak.

W. A. HEURTLEY.

NOTE ON *B.S.A.* xxvi. p. 39.

Having revisited the spot, and re-examined the road in question, I now think there is not sufficient evidence to justify the statement that it is Mycenaean.

W. A. H.

REPORT ON EXCAVATIONS AT THE TOUMBA AND TABLES OF VARDARÓFTSA, MACEDONIA, 1925, 1926.

PART II.—THE TABLES.

(PLATES XV, XVI.)

Abbreviations frequently used :—

Part I = Heurtley : Part I of this report, *B.S.A.* xxvii. pp. 1-66.

Rey = Rey : *Observations sur les premiers habitats de la Macédoine*, *B.C.H.*, Vols. xli.-xliii. (1917-19).

THE HIGH TABLE.

THE writer assisted at the excavation of the upper strata of the Toumba in 1925, and in 1926 excavated upon the High Table.¹ The results obtained in 1925 by Miss W. Lamb are here incorporated with those of 1926, from notes furnished by her. The remarks on the pottery are based in detail upon the 1926 finds, supplemented by a general study of the material obtained, both from Table and Toumba, in 1925.

The extent and levels of the Tables in relation to the Toumba may be seen from the plan published by Rey and reproduced by Heurtley²; and also here (Fig. 1); Rey also gives a useful list of measurements obtained by the Archaeological Mission of the French Army under his leadership. The High Table extends on all sides of the Toumba except to the south, forming a plateau with a superficial area of nearly three acres, broadening to practically five acres at the base.³ Its level is on an average 16 m. above that of the surrounding fields, 10 m. above that of the Low Table.

¹ Grateful acknowledgement is made to the University of Cambridge, to Emmanuel College, Cambridge, and to the Committee of the British School at Athens for the grant of studentships which enabled the writer to study and excavate in Greece; to Mr. Heurtley for his unfailing encouragement; and to M. Pelekides, Ephor of Antiquities of Macedonia, for his ready aid and courtesy; while the tedium of solitary work in Salonika was much relieved by the help of a youthful but skilled mender. Thanks due to others for assistance are specifically expressed in the footnotes.

² Rey : I. Pl. IV.; and Figs. 15 (aerial photograph), 16 and 17 (photographs of the site), and Pl. V. (section) : Part I, Fig. 6 (plan), Fig. 5 (section).

³ Rey's actual figures are 1.945 and 3.3962 hectares respectively.

SCALE: METRES
0 10 20 30 40 50
VERTICAL INTERVAL
2 METRES.

M.N.

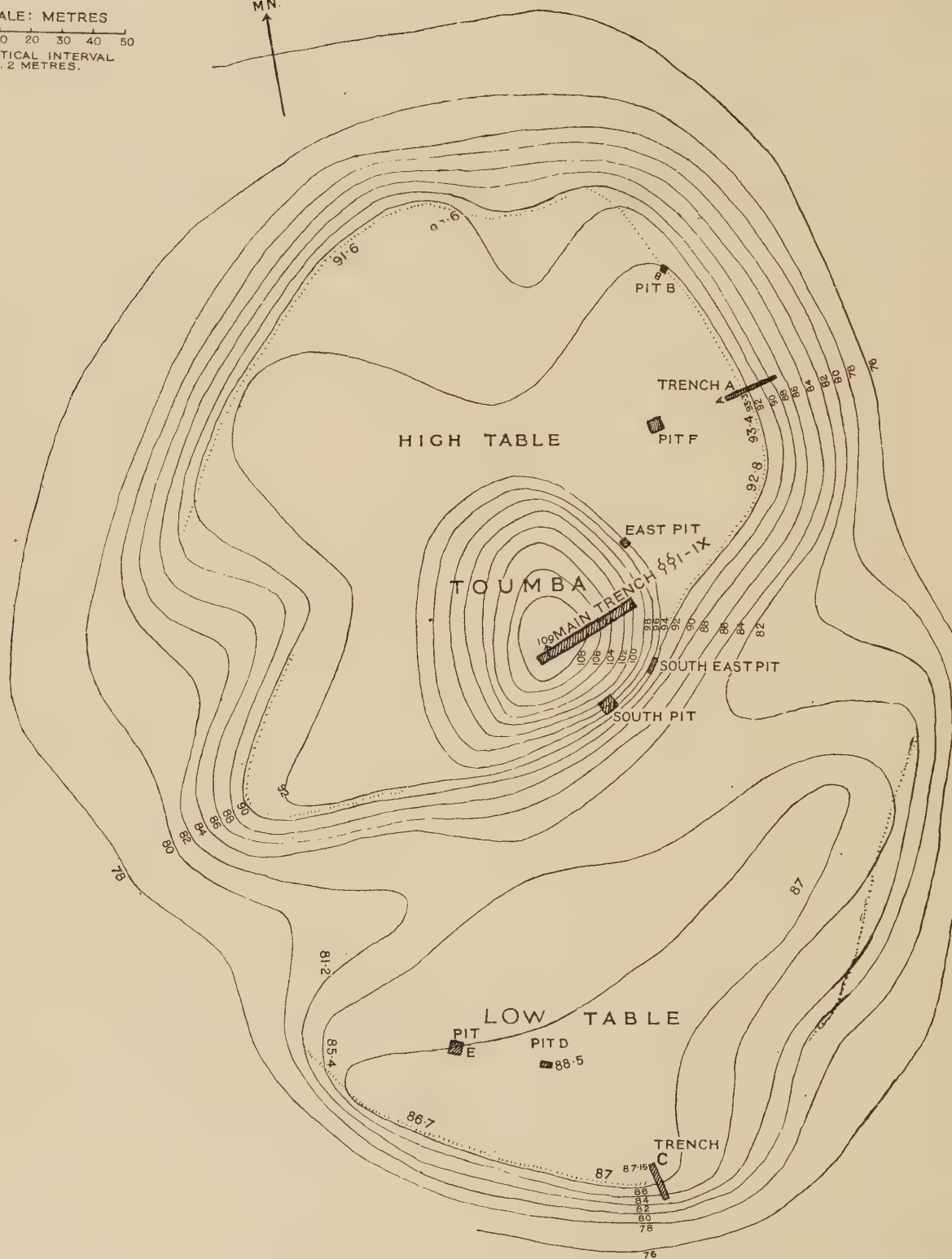


FIG. 1.—PLAN OF TOUMBA AND TABLES.

EXTENT OF THE EXCAVATIONS.

The High Table was tested only upon its eastern side, the point selected for the first test being on its edge, some 70 m. from its north-eastern entrance. Here in 1925 a trench ('A') was dug from the edge of the Table inwards to a distance sufficient to eliminate risks of confusion of strata, and to a depth of 6 m. without finding virgin soil, and had then to be abandoned: in 1926 'F' was dug to the west of 'A,' and produced natural soil at a depth of 7.75 m.; it was then continued for 75 cm., when the soil was found to be extremely hard and undoubtedly the natural subsoil. The original area of this pit was 4×4 m.: its eastern side was 20 m. from the western end of 'A,' with which it was in line (see plan, Fig. 1). But the area had to be reduced during the latter half of the excavation to one of about 3×1 m., owing to the presence of a wall running across the pit, and to the practical difficulties of digging, which, as the pit became deeper, finally necessitated the removal of the earth with the aid of a pulley-wheel fortunately available from the neighbouring refugee-village. The results were thus scantier than would have been desired, but it has to be borne in mind that the purpose of these supplementary investigations was primarily to secure adequate cross-references to the Toumba strata in order to determine the relative dates of occupation of the High Table.

EVIDENCE OF HABITATION, HOUSES, ETC.¹

Pit 'A.'

The stone walls of a house, with which was associated a complete unbroken pithos *in situ*,² occurred immediately below the surface. Nearly 3 m. below this house, but rising sharply towards the edge of the Table, was a layer of solid reddish-yellow clay varying in depth from about 1 to 1.50 m., which the excavator surmised to be the remains of a rampart of unbaked mud bricks. Accordingly, she tested to the north-east of 'A' to see whether it continued round the edge of the Table to the north-east (see plan, trench 'B'), and this she found to be the case: after which 'B' was not continued. On the inner side of the slope in 'A' was

¹ It has been thought convenient to describe these as excavated, *viz.* from the surface downwards.

² Fig. 2.

found a pit-like depression in this clay, containing ashes, with which were mingled a few bones. This Miss Lamb conjectured to have been a fireplace dug in the shelter of the rampart. Below the clay were found at two points remains of stone walls, belonging perhaps to separate structures, but possibly to the same building, extant to a height of from two to three courses (see section, Fig. 3). These would seem to represent a settlement of earlier date, whose house-remains were covered by the newly-



FIG. 2.—PITHOS FROM TRENCH 'A.'
(Height 1.20 m., greatest diameter *ca.* .9 m.)

constructed 'rampart.' These walls, bedded on yellow clay, are associated with brown earth and the traces of burning, the remains of the reed superstructure of the houses. Below the reddish clay came alternate layers of yellow clay and thinner strips of brown earth, the remains of earlier constructions, perhaps the debris of mud brick houses that had been pulled down and thrown outwards towards the edge of the Table.¹

¹ This suggestion—writes Miss Lamb—was made by Mr. A. J. B. Wace, to whom the section was shewn. The writer takes this description of the 1925 stratification from notes furnished by Miss Lamb, to whom he here makes the fullest acknowledgement of his indebtedness.

At about 4 m. below the surface, this gave place to brown earth full of potsherds, interrupted by two layers of burnt matter, one of which stretched to the foot of a wall on the west side of the trench, while the other rose to a wall on the east. At 4.50 to 5.50 m. was a layer of white earth, of which the upper part contained no sherds, the lower part few. Below this appeared more burnt brick and traces of burning, which, however, had to be left unexcavated.

‘F.’

As in ‘A,’ house-remains, associated with the remnants of pithoi, (III. b.) occurred in the first half-metre: this level was, ceramically, characterised by Hellenistic ware. A superior standard of house-construction was indicated by the numerous tile-fragments, testifying to a change from the use of the local reed thatching,¹ and by the presence of iron nails, staples and other objects, including one of lead, which probably came from a door and its lock.

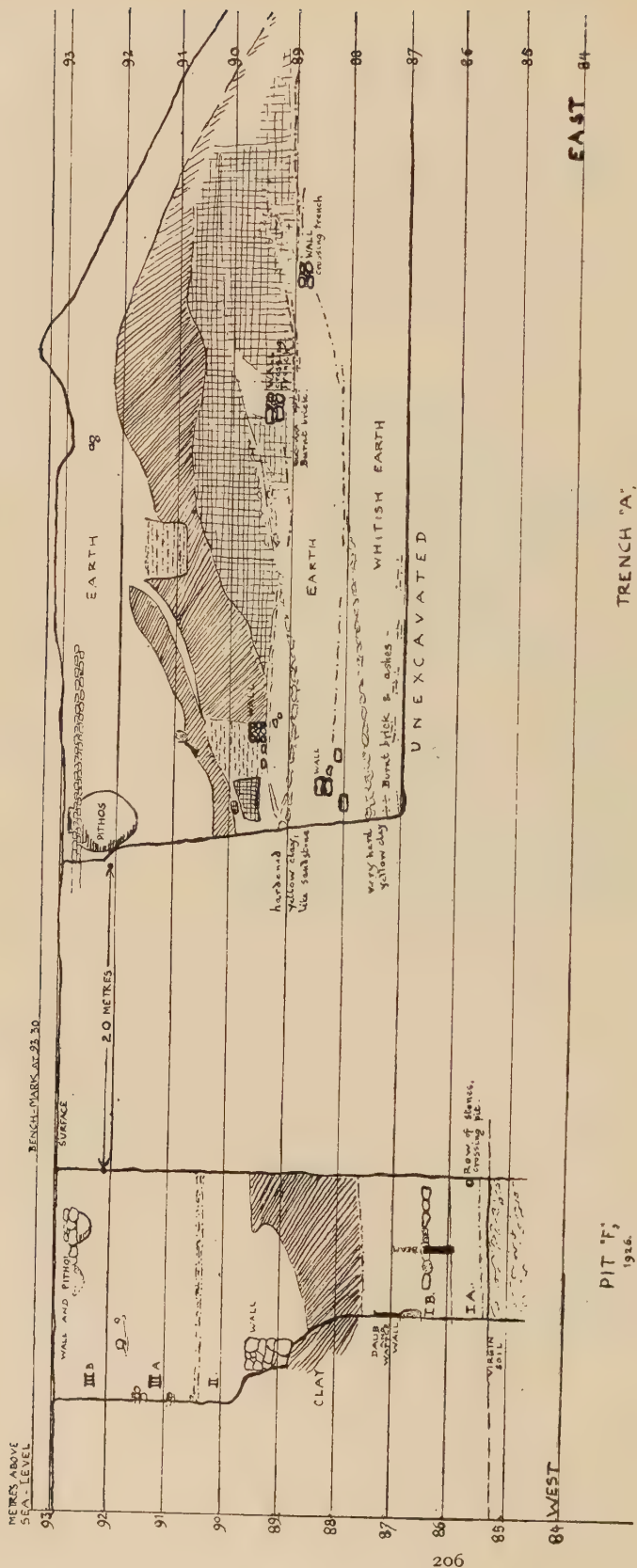
At 1.50 m. there was a change in stratification, Hellenistic wares, (III. a.) though still predominant, being supplemented by scraped ware. With this stratum were connected a single course of stones projecting from the north-west corner of the pit,² and an isolated stone in the north face, below which level was dark soft earth and, at 1.80 m., a thin layer of ash, accompanied by other signs of fire, such as burnt brick. Again below this, but still characterised by the presence of scraped ware, along with locally made painted wares, was a fragment of another house-wall, consisting of three courses of stones, in the west face.

Below this was a big burnt layer everywhere, on top of what was (II.) the richest stratum uncovered: mixed earth, evidently consisting of the remains of mud walls, topped by the big burnt layer representing the reed-thatch and the beams of the roof. This stratum extended from *ca.* 2.50 to *ca.* 4.50 m. On the west side of the pit was a stout stone wall³ of four courses, running obliquely from south-east to north-west, placed

¹ The modern refugee-villages are built mainly from local materials—mud brick, etc.—but tiles are imported from outside Greece; tile-clay of excellent quality also occurs south of Salonika. The local reeds are used to form ceilings below the rafters.

² These single rows of stones were probably foundation-courses for mud brick walls, as in modern building practice in the neighbourhood.

³ Fig. 4.



SECTION ACROSS HIGH TABLE OF VARDAROFTSA, 1925-26.

FIG. 3.—(Scale 1 : 125).

upon a mass of reddish-yellow clay, evidently imported, which extended throughout the pit and must be considered separately. The space to the east of this wall was filled with black ashy earth, especially at its foot, where traces of partially burnt wood were found among thick ashes. Here were found certain small bronze objects, including a bird, which will be dealt with in their place. The reddish clay rose from west to east, finally rising steeply in the last metre from the east face. Above this 'step' in the clay, close to and penetrating the east face, was a nest of pottery fragments packed closely together, comprising a number of more



FIG. 4.—WALL IN PIT 'F.' (Height *ca.* 8 m.)

or less complete pots: it is indeed clear that, had it been desirable to extend the pit in this direction, at any rate several vessels would have been recovered, *i.e.* that the nest consisted of pots buried *in situ* when the building fell, rather than the scattered debris of a rubbish-heap. The great bulk of the pottery was of local manufacture, but imports from the south continued, and were of better quality than those found in the upper stratum. A single course of stones in the south-east corner occurred at 4.00 m., and seems to be posterior to the importation of the reddish clay, since they were placed upon it, and at this point it sank in level, whereas elsewhere it rose above the level of these stones.

(I. b.) At this point it was necessary to narrow the area of the pit,¹ and only a strip 1 m. wide and 3 m. long was excavated. The reddish clay—which was universal at 4.20 m.—became very hard and yielded almost nothing; the handful of sherds found in it belong to the upper strata; they were mainly 'domestic' or local painted and plain wares characteristic of the nest: in the lower half of the 5th metre was found the lowest specimen of Greek black glazed ware, a small fragment. The whole lower half of the 5th metre yielded, over its whole superficial area of 3.90 square metres, only 34 sherds in all. But at about 5.25 m. the clay began to give place to softer earth, containing traces of ashes, some bones, and specimens of a different ceramic, notably the scattered fragments of a painted pot: while other sherds of a more primitive appearance gave promise of renewed fertility. By 5.60 m. the earth was soft and dark throughout, with a well-defined layer of scattered ashes, including little bits of burnt wood: below that level, sherds, although not plentiful, were consistently of kinds not hitherto characteristic of this pit—twisted handles, striated ware, fragments of kantharoi, and local painted pottery. These were associated with a still standing portion of a daub-and-wattle wall, found at the extreme west end of the pit at level *ca.* 5.75—*ca.* 6.20 m.; it was based on a kind of soft sandstone to which further reference is made below; this foundation-course was 35 cm. deep. The earth at this level was a mixture of blackish soil and yellow clay, not producing many sherds: ashes were plentiful in the centre of the pit; and further remains of building were found in the form of a partially decomposed wall at 6.50 m., and close to it the charred and decomposed stump of a beam, extending from 6.55 to 7.15 m.; the ashes which occurred just above it were probably the burned remnants of the upper part of the beam. The line of stones composing the wall here consisted partly of good stones, partly of a sandy crumbled mass of the same type as that found below the wattlework. There is a local stone of this character, and it can hardly be doubted that bits of it were incorporated in the foundation-courses of mud brick houses, as they are to-day in the district. Another parallel is afforded by the use of sherds and shells as binding material in the mud walls: the wattlework had embedded in it over a dozen sherds, including an incised specimen,² and three cockle-shells. It seems likely that the stone wall and the beam belonged to the same house as the daub-and-wattle wall,

¹ See p. 203.

² Fig. 5, 1.

in spite of a slight difference in levels : for there was a mass of black sooty earth descending from the centre of the pit towards the west end, where it became very thick, and yielded the greatest proportion of sherds found at this level; presumably a hole dug at this end of the house served as a fireplace. Below this hearth-layer came apparent traces of a clay floor, though the soil was patchy and it was not possible to establish over so small an area a definite, hard-beaten floor-level : the period of occupation, before fire overtook the house, cannot have been very long.

The earth below this settlement became again soft and dark everywhere at 7.10 m., and sherds were plentiful, notably examples of the real 'purple on buff' ware. At 7.30 m. at the east end there was a row of small stones running obliquely across the pit : the height of the tallest was only 15 cm. : below them was dark ashy earth, and, 20 cm. below the stones, a definite streak, 5 cm. thick, of ashes. With this stratum the history of the habitation of the High Table ceases, or, rather, begins; for natural soil, a hard yellow clay, was found suddenly at 7.75 m. (I. a.)

THE POTTERY, CONSIDERED RELATIVELY TO THAT FROM THE TOUMBA.

I *a* and *b* : the two settlements below the reddish clay did not yield a great deal of pottery; this was to be expected from so small an area, in which, though house-remains were fortunately found, no mass of pottery, like the 'nest' above the clay, occurred. Hence what was found was fragmentary, yet served, supplemented by evidence from 'A,' to draw comparisons with the Toumba, which serves as a kind of encyclopaedia of ceramic in the Vardar Valley; without this, the generally insignificant scraps from 'F' would have been of limited use as a guide to the wares of the period which it covers. However, the pit made a useful contribution from these lower levels to the early history of scraped ware.¹

I a. The homogeneity of the first three-quarters of a metre above virgin soil was shewn by the presence throughout of fragments of a monochrome painted pot. An examination of the pottery in the light of the Toumba evidence makes it clear that the High Table, at any rate at this point, was not occupied before Period D : we have no fragments which can be classed as Danubian, nor as definitely Mycenaean. On the other hand, a few glazed sherds are distinctly reminiscent of Mycenaean

¹ See below, pp. 233 ff.

pottery, and bring the earliest settlement within reach of the sub-Mycenaean period. But the excess of wheel-made painted local wares over hand-made and unpainted forbids us to place its date too high. Much of this pottery is monochrome; it is often difficult to decide from small sherds whether a wheel was used or not; probably a slow wheel was used for the cruder varieties of this nondescript D 4 ware. Decoration—if one may so dignify the activities of these pot-painters—generally consists of a mere rim-band or line of paint round the shoulder of the vase, occasionally of a wavy line. But we have also to notice the occurrence of the true purple on buff, painted, wheel-made ware, of which the presence of a silvery slip or wash seems to be a criterion. This silvery tinge may be regarded as due to experimenting—perhaps in opposition to the dying employment of Mycenaean-derived glaze paint—with the local abundant resources of mica. At any rate we find it not only in buff-ground painted vases, but also in a light grey, unpainted, wheel-made rim from the 16th half-metre, and in another grey sherd from the half-metre above, and in a hand-made, hard, red sherd which has over the biscuit a wash of thinly applied yellowish substance which gives to it the peculiar silvery effect. This technique occurred in isolated examples from the 11th to the 16th half-metres; but, so far as can be judged from the evidence of a test-pit, it is commoner in the earlier levels, and is, as stated above, a criterion of the real purple on buff ware. The purple paint is very friable and has sometimes flaked off altogether: it is sometimes applied in groups of small dashes or blobs.¹ One sherd from the upper part of the 15th half-metre displayed the rare red paint on buff (in this instance with the micaceous coating) noted by Rey.² The design was indistinct, but the paint was of a bright vermilion colour.

The shapes of these wheel-made wares were those given by Heurtley,³ so far as they were recoverable: jugs, including specimens with cut-away necks, small bowls both of the sub-Mycenaean derivative type,⁴ and, more commonly, of the Chaeronea type,⁵ and larger bowls occur. A triple matt-painted handle was found in the lowest layer, as well as portions of double handles and of single handles presenting a flattened oval in section.

¹ Heurtley, Part I, p. 28, groups this pottery with the rest under D 4: yet the silvery tinge, combined with the use of a purple paint distinctive in character from that used on other pots, would seem to constitute a definite sub-variety.

² Rey, 257, note 1.

⁴ Part I, Fig. 14, 6.

³ Part I, p. 28.

⁵ Part I, Fig. 14, 5.

A certain amount of unpainted, wheel-made ware was found, grey and buff; more numerous than this, but standing in the proportion of about 1 : 3 to the painted wheel-made fragments, were hand-made sherds of Class A 1 ware, mostly bits of simple bowls with straight rims. The polished specimens often exhibited traces of the instrument, a factor which the writer considers to be of importance in the history of scraped ware; and three sherds of actually scraped ware, D 6, were found.¹ Two or three hand-made sherds had been treated with paint. One striated (A 3) sherd occurred, in the 15th half-metre.

Turning to the Toumba, we find the true purple on buff wheel-made ware in the 5th to 7th half-metres: while the rare appearance of scraped ware in its earlier stages on the High Table in the 15th half-metre is paralleled by two sherds from the 7th half-metre of the Toumba which the writer noted as shewing a somewhat tentative scraped technique. On these grounds the lowest stratum of the High Table may be synchronised with the upper part of the 8th half-metre on the Toumba, with a *terminus post quem* of ca. 1000 B.C., and perhaps some 200 years after that date. A very small but undoubtedly Hellenic Geometric rim-fragment² from the 16th half-metre provides an additional testimony to this dating.³

The comparative figures given below are quoted with all reserve, since the excavation of a portion of a single house cannot be expected to establish authoritatively the proportions of the various wares in general use. Allowances must be made both for the smallness of the area excavated and for the individual choice by the occupants from among the numerous types of pottery available at the time.

Doubtful sherds displaying no wheel-marks, but perhaps the product of a slow wheel, are classed as 'wheel-made' on the ground of analogy; 'hand-made' is used to refer to A wares and to coarse domestic pottery, with the addition of D 6 ware, of which the examples from this stratum certainly appear to have been made by hand. The distinction between 'monochrome' and 'patterned' ware is to some degree a nominal one, since a sherd wholly coated with paint may well have belonged to a patterned pot.

¹ See below, p. 234.

² Identification confirmed by Professor E. Buschor.

³ Heurtley, Part I, p. 30, notes a few imported Geometric sherds from the Toumba.

STRATUM IA.

Half-metres.	Hand-made.				Wheel-made.							Total.
	Coarse domestic.	A 1.	A 3.	D 6.	Un-painted.	Painted monochrome.	Patterned.				Hellenic Geo-metric.	
							Purple on buff.	Red on buff.	Glaze reminiscent of Mycenaean.*	Various.		
16 ($\frac{1}{4}$ metre only)	2	6	--	—	8	26	2	—	2	16	1	63
15	9	23†	1	3	7	60	9	1	2	49	—	164
	11	29	1	3	15	86	11	1	4	65	1	227

* A few other sherds suggested Mycenaean paint, but these were outstanding examples.

† Including two painted specimens.

I b. The 11th to the 14th half-metres are best treated as a single stratum, since it is only in the 13th and 14th that we have a well-defined occupation-level, sherds in the 11th and 12th half-metres being sporadically distributed among the mixed remains of mud-brick house-walls. Still it is curious, though it may not be significant, that the proportion of painted and wheel-made sherds to hand-made is much greater in the 14th half-metre than in the others; there is the possibility that some of the sherds found above that level were embedded in the clay of which the ruined house-walls were composed, and therefore actually represent ceramic history earlier than that represented by the definite occupation-level of the 14th half-metre; just as the daub-and-wattle wall of the 12th and 13th half-metres contained an incised (D 2) sherd and a bit of a hand-made cut-away neck, as well as other fragments.

If we confine our attention to the well-marked occupation level of the 14th half-metre, we have a great preponderance of painted wares, which include two bits of a jug-neck ornamented with lines crossing each other at right angles; a little monochrome grey ware; some fragments of small bowls of the sub-Mycenaean derivative type, and a number of nondescript sherds with bands of paint or wholly covered with monochrome washes of varying shades of brown and red. A single sherd of true scraped ware, D 6, made on a wheel, was found. On the whole this layer seems to correspond most closely with the 5th half-metre and

perhaps the 6th on the Toumba, and the fortunate discovery of a fragment of a large imported vase of archaic Greek manufacture¹ confirms this dating. The 5th half-metre of the Toumba yielded Corinthian pottery dated by Heurtley to *ca.* 600 B.C.² The only other imported sherd found at this stratum was a small fragment from the upper half of the 12th half-metre, which had been so damaged by fire as to make identification impossible: rays are discernible upon its shoulder, and below that a horizontal band with pendant curved lines. It is perhaps part of a B.F. *lekythos*, but further speculation is hazardous.

Hand-made sherds from the 11th to 13th half-metres belong mostly to Class A 1. The much-damaged base of an A 17 bowl occurred in the 13th half-metre, and six twisted handles were found at that level and one from the 11th half-metre. Two of these are illustrated in Fig. 5, 9, 10; one is a big coarse handle of red clay containing much mica, the other a buff finely-polished handle. Fig. 5, 8, shews another coarse handle with a flat grip on top. The twisted handle fragment from the 11th half-metre was ornamented with incised dashes at its base.

Casual incised sherds included one C 1 specimen from the 11th half-metre (Fig. 5, 7), the twisted handle referred to above, a couple of examples from the 12th and 13th half-metres, and the D 2 specimen with tangentially joined circles found in the daub-and-wattle wall (Fig. 5, 1).

A 3 (striated) sherds occurred in the 11th to 13th half-metres: the best examples of this ware have fine striations placed close together (about eight to the centimetre), running mainly in the same direction, and suggesting strongly by their appearance that they were made with a stiff brush. Inferior examples may have the striations spaced out to twice that width.

Fig. 5, 2-4, shews coarse fragments from this level: that in the centre is a quadruple imitation of a ribbed handle, but made in one piece instead of from separate members. The sherd on the right shews a kind of striated treatment of fine lines.

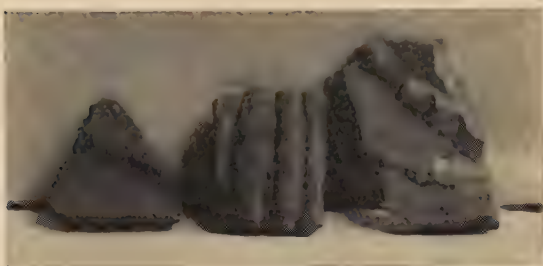
¹ This is a bit of a pot whose walls are about 1 cm. thick; made of warm buff clay, of uniform colour throughout, fairly well cleaned, but containing bits of some crimson substance (sand? or vegetable?) and very little mica. It is covered on the outside with dark sepia paint except for two reserved bands, 2 and 3 mm. wide respectively. The inside is unpainted. Once again thanks are due to Professor E. Buschor for kindly giving the benefit of his opinion on this sherd.

² Part I, pp. 30, 64.



5-7

2-4



8



9

10

FIG. 5.—POTTERY FROM PIT 'F,' STRATUM I b.
Nos. 5 6, from Stratum II. (Scale No. 1, 2:3; Nos. 2-4, 2:5; Nos. 5-7, 3:8;
No. 8, 5:13; Nos. 9, 10, 5:9.)

A bit of a rim of a cup of D 3 ware of the type illustrated by Heurtley ¹ was found in the upper part of the 13th half-metre, and what is probably another in the 14th.

It was mentioned above ² that the fragments of a painted pot gave indication in the 11th half-metre of renewed productivity after the barrenness of the clay of the 9th and 10th half-metres. These fragments were 14 in number, and were scattered throughout the 11th half-metre, principally in its lower part. They made up into four groups of 'joins' and clearly came from a fair-sized vessel, whose walls were in places 8 mm. thick. The clay was grey, firing to buff, but presenting on the inside a porous surface. Though no pronounced wheel-marks were visible, this pot was almost certainly wheel-made. On the buff surface were painted in orange-brown horizontal bands varying in width from 4 mm. to 1 cm., while one stripe was at least 4 cm. wide : and one sherd displayed a kind of gridiron ornament (Fig. 12, 1).

The following figures are again quoted with reserve :

STRATUM I.B.

Half-metres.	Hand-made.				Wheel-made.					Total.
	Coarse domestic.	A 1.	A 3.	Incised.	Un-painted, various.	D 3 grey mono-chrome.	D 4 and D 5.	D 6, scraped.	Imported.	
14	7	6	—	—	9	6	65	1	1	95
13	3	25	1	1	4	3	18	—	—	55
12	11	7	2	1	10	7	20	—	1	59
11	8	8	4	2	1	—	30	—	—	53
	29	46	7	4	24	16	133	1	2	262
12 in wall	1	2	—	1	6	—	6	—	—	16

II. The 10th half-metre, and the eastern part of the 9th, consisted of the hard yellow clay upon which the wall was built, and contained only a few accidental sherds, of which the only one that calls for mention is the small bit of Attic black glaze from the 10th half-metre, the lowest example of this imported ware found. Stratum II covers the area from

¹ Part I, Pl. XX. a, 1.

² P. 208.

the 9th up to the 6th half-metre, which was, as has been mentioned, the most productive level of this pit, yielding not only certain bronze objects but also a mass of ceramic remains closely packed together in a 'nest' in the eastern portion of the 6th half-metre. This stratum is fortunately clearly dated by finds of Attic black-glazed pottery, which correlate the lower part of it with the lower part of 4th half-metre of the Toumba, where fifth-century Attic sherds occurred,¹ while the later specimens of Hellenic pottery, those from 6th and 7th half-metres of the Table, date to the fourth century and correspond to the upper part of

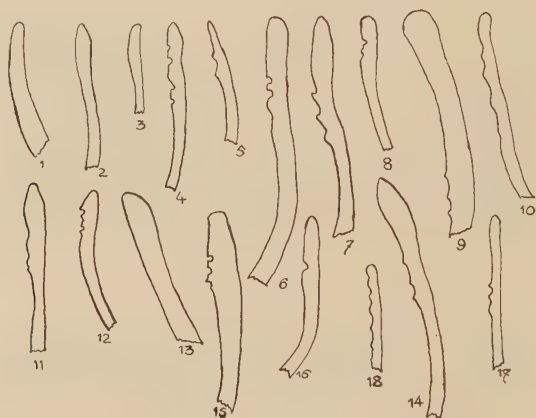


FIG. 6.—PIT 'F,' PROFILES OF RIMS.

Nos. 1-7, 9-14, Stratum II; 8, 15-17, Stratum III (5th half-metre); 18, 'kantharos' (D 3) rim from Stratum I *b*. Nos. 1-8 preserve evidence of cut-away necks. (Scale *ca.* 1:2).

4th half-metre of the Toumba and the lower part of its 3rd. With these conclusions the general evidence of the Toumba agrees, the pottery from its 4th half-metre consisting mainly of inferior painted wares such as are characteristic of the 'nest'; while the incidence of D 6 (scraped) ware on the Toumba is:—common in the 2nd half-metre, continues through the 3rd, occurs in the 4th: while on the Table it begins in the 2nd, is commonest in the 4th, was evidently considerably used along with painted wares of the 'nest' period, and remains fairly common down to the 9th half-metre.

The bulk of the pottery belongs to classes D 3 and D 4; a large number of rim fragments of jugs were found made from buff or grey clay,

¹ Part I, p. 30.

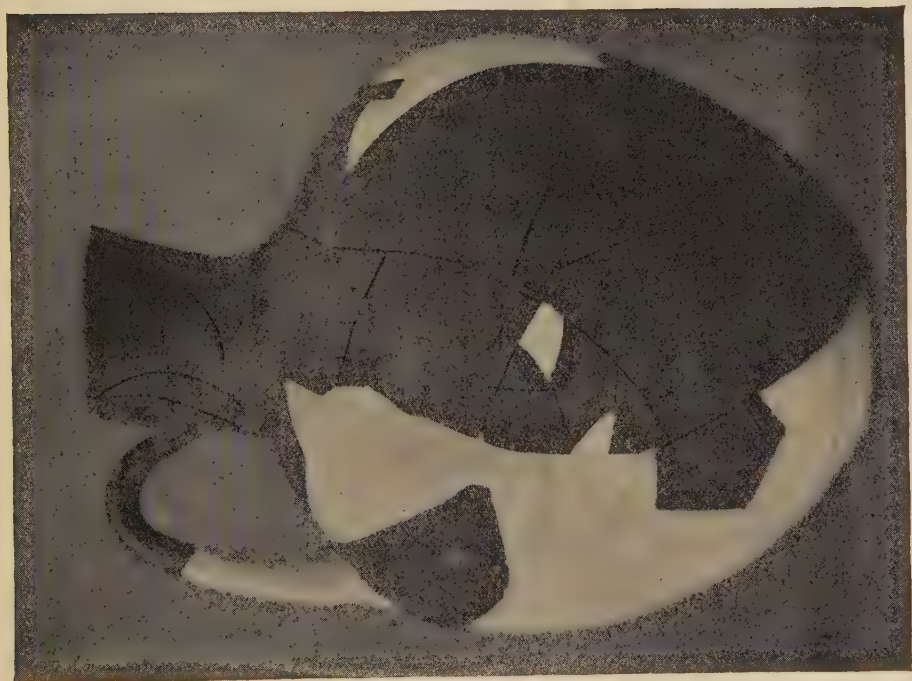


FIG. 7.—*a*, JUG FROM PIR 'F.' (Scale *ca.* 1:4.) *b*, SHOULDER-DECORATION. (Scale *ca.* 3:8.)

and ornamented with paint, with wheel-made furrows, or with a combination of both : in addition to a complete jug and four tops of jugs with cut-away necks, bits of 13 jugs certainly, and probably many of 33 more fragments, belonged to this type of vessel, though no direct evidence is forthcoming for the last group. The profiles of some typical examples are shewn in Fig. 6. The big jug shewn in Fig. 7, *a*, it was possible to restore completely from rim to base. Found in the 'nest' of the 6th half-metre, it stands .41 m. high, and has a maximum girth of 1.03 m. The clay is fired grey; on a buff ground are bands and designs in purple-brown paint, which has faded badly. Round the neck there are, besides a rim-band, four bands of paint, the lowest two of which are not carried completely round the circumference. A broader band marks the junction of neck and shoulder. Below this comes a zone of wild decoration, reproduced approximately in Fig. 7, *b*, the subject of which defies recognition, and had best be regarded simply as native Macedonian art of the fourth century. Below this zone the vase is surrounded with a number of brush-bands—ten in all, varying in width from *ca.* 3 to *ca.* 8 mm.—with, in two places, transverse lines joining three or four bands at right angles : one of these fragments came from opposite the handle, the other is a sherd for which no 'join' was found. Below these bands, after a reserved interval 5.5 cm. wide, came two more brush-bands placed so close together as practically to form one band. The handle is triple, with a small central member¹: the depth of the 'cut' in the neck is 4 cm. (see Fig. 8, *a*).

With this restored jug we may compare the necks shewn in Fig. 8, *b*, all from the same 'nest.' Nos. 1 and 2 are covered with washy brown paint, with rim-bands in a darker colour; and both have wheel-made grooves below the rim, and ridges at its junction with the shoulder. In addition, No. 1 has a small raised rope-pattern as mentioned by Heurtley²: four sherds of this kind, from different vases, were found in the 7th half-metre. No. 1 has a triple handle similar to that of Fig. 8, *a*, No. 2 a double handle. The base of the central member of the handle of No. 1 has three crosses incised on it : $\begin{smallmatrix} \times \\ \times \\ \times \end{smallmatrix}$.

No. 3 is a similar neck, from which the handle is missing, made of

¹ See below, p. 221.

² Part I, p. 30, "Miscellaneous"; *ibid.*, Pl. XX.*b*. It occurs on the Toumba in the 3rd half-metre, and is commonest in the 4th.

grey unpainted clay upon which are bands of crimson paint; here again we see the wheel-made grooves and ridge. The walls of this jug are very thin—not 3 mm. in thickness.

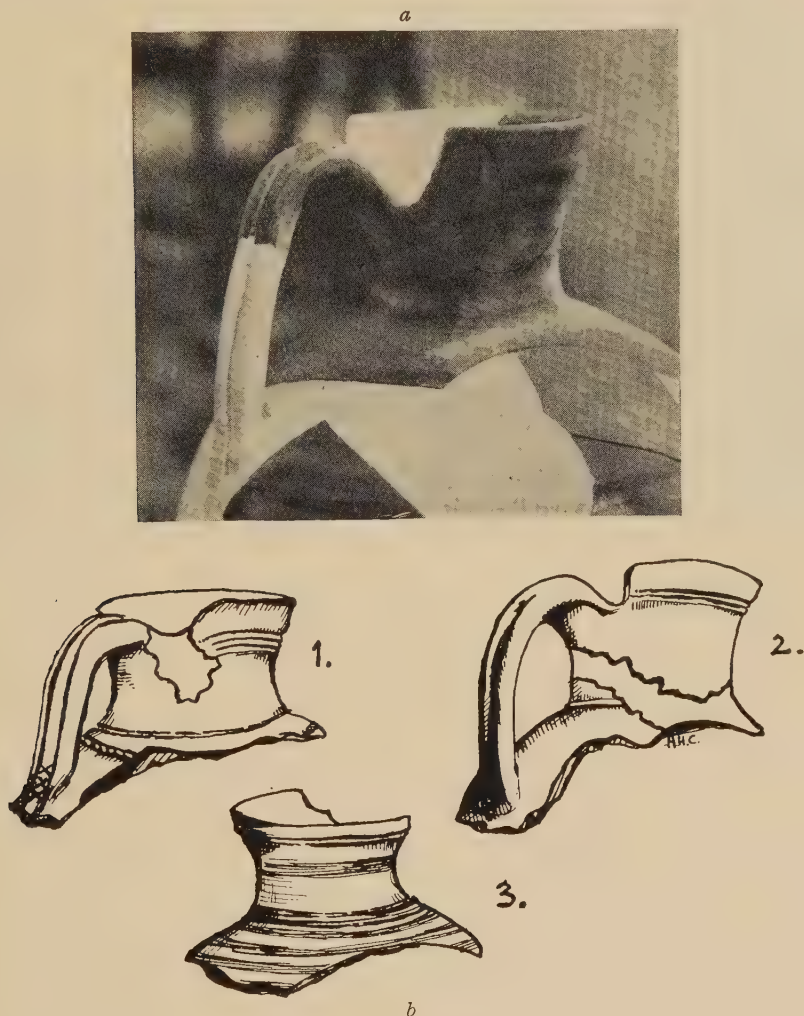


FIG. 8.—CUT-AWAY NECKS FROM PIT 'F.' (Scale *a*, ca. 1:4; *b*, ca. 1:5.)

The external rim-diameter of these jugs is, respectively, .16 m., .155 m., and .13 m. All three have a 'cut' measuring approximately 2 cm. in depth, as compared with the 4 cm. of Fig. 8, *a*. A still further step in the degeneration of this characteristic feature of Macedonian

pottery towards a merely formal cut-away neck is illustrated by Fig. 9, *a*, which shews another specimen from the same level.

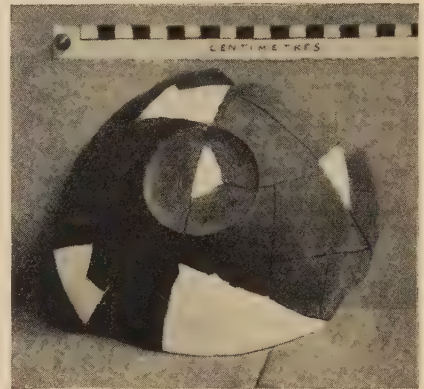
*a**b*

FIG. 9.—*a*, CUT-AWAY NECK FROM PIT 'F.' (Scale *ca* 1:2.) *b*, BOWL OF CLASS (2) FABRIC FROM STRATUM II. (Scale 2:9.)

A great many handles of jugs and amphorae occurred in this stratum : the following figures give an idea of the large number of big pots represented by the ceramic remains of the 'nest' level, and also of the comparative frequency of the different types.

Half-metres.	Rolled Handles, Circular in Section.					Ribbon Handles.	
	Painted.			Unpainted.		Painted.	Unpainted.
	Triple.	Double.	Single.	Double.	Single.		
6	6	20	—	—	—	17	1
7	3	12	2	1	4	3	2
8	—	1	1	1	2	1	1
9	—	2	—	—	1	—	1
10	—	—	—	—	—	—	—

These double rolled handles are those referred to by Heurtley as 'grooved,' and are, as he says, made in two pieces, like the grooved handles

of Period A.¹ The triple handles, on the other hand, are of two varieties : one, apparently the earlier, simply consists of three separate members similarly joined together ; Stratum II produced three examples of this kind, and there was another from the stratum above ; while the painted handle found in the lowest half-metre of the pit, the 16th, was of this type, and so are the handles of the bowls from Chauchitsa illustrated by Casson.² The other type is really a double handle with a superadded smaller member in the middle, giving a trefoil section. Some of these handles are of very elegant appearance and careful execution. Stratum II produced six examples, of which five came from the 'nest' : two are illustrated in Figs. 8, *a*, and 8, *b*, 1.

The ribbon handles fall into three categories : those which are oval in section, those which are depressed in the centre, and those which have a central rib on either side of the ribbon. The third kind is twice as common as the other two combined. Besides these varieties there are a few examples of jug- and amphora-handles of irregular shapes.

Of bowls there was, as is natural for a community which was mainly pastoral and milk-using, a great variety. But by far the commonest kind was the small bowl doubtless intended for table-use. The 6th and 7th half-metres together produced fragments of over a hundred different bowls of this kind. Such little bowls occurred throughout the pit, but there is a discernible abandonment, after Stratum I *a*, of the sub-Mycenaean derivative type (Part I, Fig. 14, 6) in favour of the Chaeronea type (*ibid.*, 5) and a variety of rims (Fig. 10, *a*).

Among these small bowls there are, besides the ordinary painted ones which form the vast majority, certain special fabrics which call for mention. These are :—(1) Bowls of fine fabric, thin (often not so much as 2 mm. thick), with a painted surface that is very smooth and velvety to the touch. The clay is micaceous, and not very well cleaned : quite large fragments of chalky earth occur in it. Two rims are shewn in profile in Fig. 10, *b*, 1, 2, from the 7th and 8th half-metre. A base, 4 cm. in diameter, from the 6th half-metre probably comes from the same bowl as the rim from the 7th half-metre. Another bit of a base came from the same level, and sherds from the 5th half-metre and from the 'nest' level. In colour this ware ranges from light red to dark brown. From this are to be distinguished : (2) thin pinkish painted bowls, the characteristic

¹ Part I, p. 28.

² *B.S.A.* xxiv. p. 22, Fig. 16.

of which is that the paint is applied, not in a dense coating, but lightly so that the buff clay ground shews through in horizontal bands. Bowls of this sort were found by M. Pelekides at Kalamaria,¹ and an almost complete

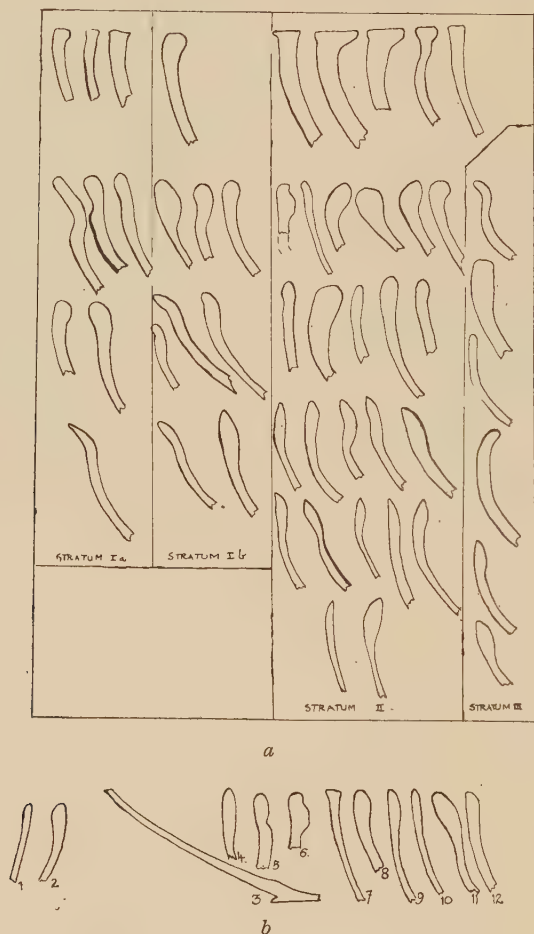


FIG. 10.—PROFILES, ETC., OF SMALL BOWLS FROM PIT 'F.'
b, Nos. 1, 2, Class (1) Fabric; No. 3, Class (2); Nos. 4-12, Class (3);
 (Scale *a*, 3:8; *b*, 1:2.)

one was made up from fragments from the 'nest,' and is illustrated here (Fig. 9, *b*), together with a drawing (Fig. 10, *b*, 3) shewing the profile of a base from the same level. This base is typical both of the fragments

¹ In the Prefecture at Salonika: not published.

from Vardaróftsa and of the bowls from Kalamaria. That of the made-up bowl is 6 cm. in diameter : unfortunately no part of the rim was found, but at one point the wall, after attaining to a maximum diameter of *ca.* 17 cm., begins to turn inwards; there is also a swelling for the handle. This ware too is very thin, sometimes less than 2 mm. thick. Since a similar flat base, in this case covered with the silvery micaceous wash in vogue at that period, was found in the 14th half-metre, it is concluded

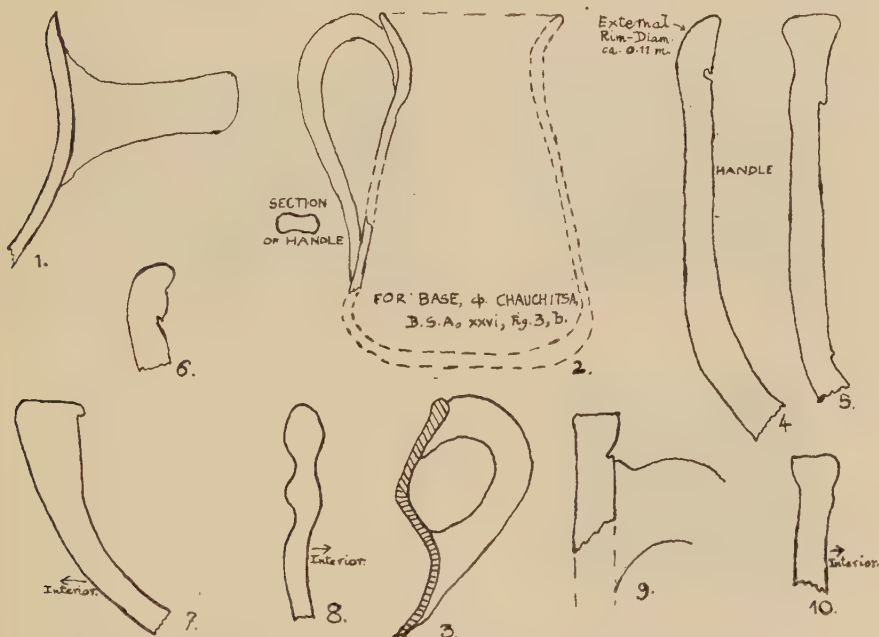


FIG. 11.—PROFILES OF RIMS FROM PIT 'F.' (Unpainted except No. 1.)
Nos. 9, 10, Stratum III *a*; remainder, Stratum II. (Scale 4:9.)

that this ware has a fairly long history behind it. (3) The third fabric is a light red painted one, likewise very thin—some examples were found which were hardly more than 0.15 m. thick—but not possessing the distinctively velvety surface of the first-named ware. Fragments of this pottery differ considerably in finish and in thickness, some presenting an appearance at first sight like that of Arretine ware, though without its finish. Some rims are shewn in Fig. 10, *b*, 4–12: of these all came from Stratum II except No. 7, which is from Stratum III *a*, and No. 11, which was found in the lower part of the 15th half-metre (Stratum I *a*): sherds

occurred in the 16th half-metre (two), the 13th (one), and the upper part of the 11th (one), as well as in Stratum II (two); so that this ware also began before the period of the 'nest.'

These three wares appear to be distinctive, and, to judge from their superior finish, thinness, and rarity, to have been table-wares *de luxe* of the area and time under review.

Of larger bowls there were several fragments. Fig. 11, 1, shews the

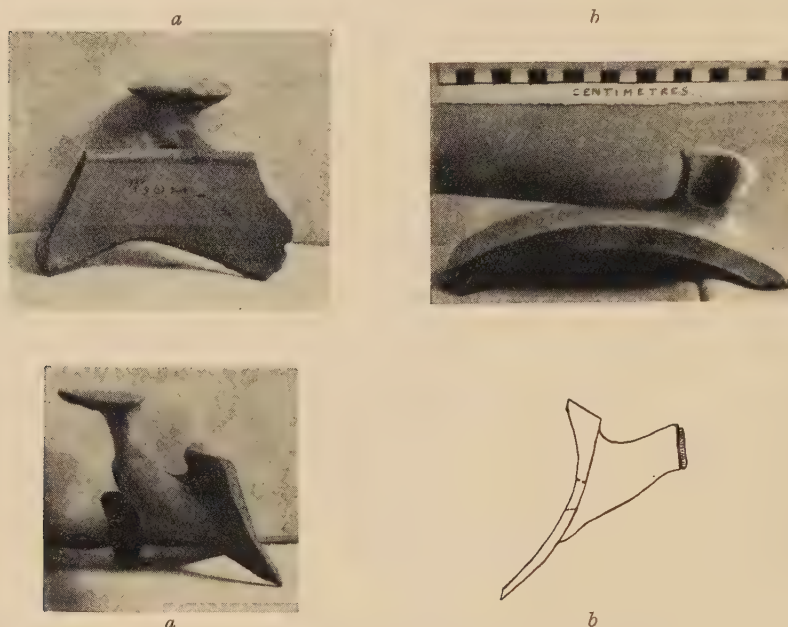


FIG. 12.—*a*, HANDLE FROM STRATUM II, PIT 'F.' (Scale 3:8.)
b, PART OF SPOUTED BOWL FROM STRATUM II, PIT 'F.' (Scale 2:7.)

rim of one from the 8th half-metre, whose diameter was about .3 m. It has a rolled handle, and presumably the complete vessel had two, as had some of the smaller bowls of the second class differentiated above, if we may judge from the Kalamaria specimens. (The ordinary small bowls are found both with rolled and with pinched-in strap handles.) A bit of a bowl furnished with a side-spout, a natural feature for a dairying-bowl,¹ came from the 'nest' (Fig. 12, *b*): it is of ordinary wheel-made painted fabric, ornamented with dashes of paint at intervals along the flat rim;

¹ Cf. Part I, Pl. VII.*b*, 9 and 10, Pl. XX.*b*, 3.

rim-fragments of similar shape and decoration came from the 5th half-metre. These bowls were of great width: that from the 6th half-metre is calculated at .26 m., that from the 5th at as much as .4 m. internally.

Other bowls had handles placed vertically on the rim.

The curious painted handle shewn in Fig. 12, *a*, from the upper part of the 9th half-metre, has a flat disc upon it to serve as a thumb-rest.

Little jugs were also in use, sometimes roughly painted, more often unpainted (Fig. 11, 2, 3).

Before passing to unpainted wares, the general characteristics of the painted pottery of this period may be briefly considered. The colours employed range from black to yellow, passing through the browns, and including crimson-purple. Black is found only on grey vases, on which the purple is also used. The commonest variety is the purple on buff,¹ with, usually, simply horizontal bands surrounding the pot, often applied very carelessly, varying in breadth and sometimes trickling down the vase. There are, however, some better executed examples, though in general the treatment can best be described as 'slapdash.' Sometimes, when the brush ran dry, the painter left his band unfinished. Sometimes the horizontal bands are crossed, diagonally or at right angles, by other lines: thus on the sherd from the 5th half-metre shewn in Fig. 13, 2, there are dark brown lines carried across encircling bands of crimson. Fragments of a vase from the 'nest' have zones of dark brown, purple and yellow ochre; but the broadest stripes seem generally to have been executed in purple.

Adjuncts of the stripe system of decoration are provided by the wavy line, and less frequently by other motives. Several examples of the wavy line occur throughout, while other motives include the shoulder-decoration of Fig. 7, and similar ones such as that shewn in Fig. 13, 4. One example of concentric circles occurred, from the 'nest' (Fig. 13, 5). A rim from the 9th half-metre (Fig. 13, 8) had a series of vertical lines picked up by dashes above and below, which is of interest, since the same form of decoration recurs in scraped ware (see p. 234).

Apart from these meagre motives, some sherds are decorated by the crudest throwing about of the paint, without design or order (*e.g.* Fig.

¹ This description is used without prejudice to the distinction drawn above (pp. 210 f.) between these ordinary wares and the true 'purple on buff' of the lower strata.

13, 6 and 7). The effect of these pots is both bizarre and barbarous, and is enhanced by the use of gaudy paint—deep crimsons, yellows, and bright reds.

Among the unpainted wares there are still a few hand-made specimens, although they are exceedingly few in proportion to the great mass

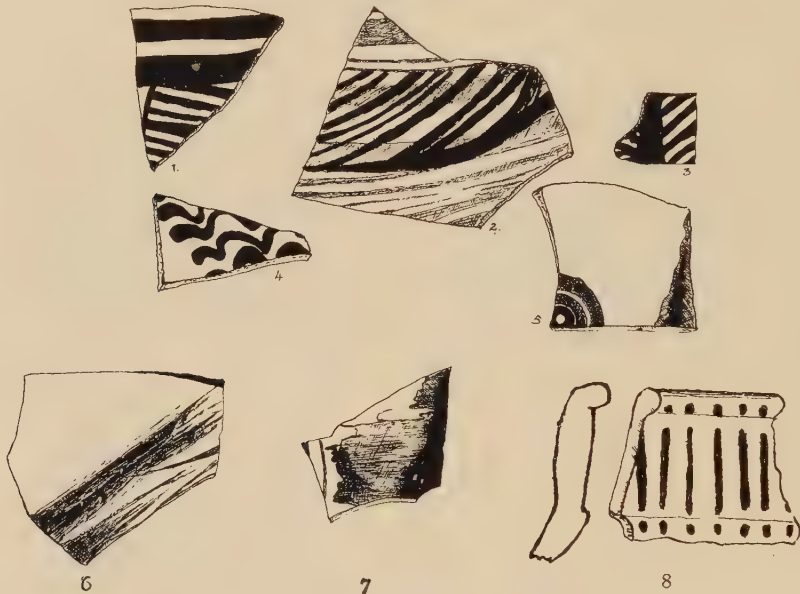


FIG. 13.—PAINTED SHERDS FROM PIT 'F.'

No. 1 from Stratum I *b*; No. 2 from Stratum III *a*; Nos. 3-8 from Stratum II.
(Scale 3 : 8 except No. 8.)

of wheel-made sherds. Some indeed may be accidental intruders from an earlier period. The numbers are as follows :—

6th and 7th half-metres	.	.	.	12
8th and 9th	„	.	.	7
10th half-metre	.	.	.	3

There are several fragments of bowl-rims, two bits of twisted handles, one incised handle (D 2) and an incised sherd (Fig. 5, 8, 7).

Of A 3 (striated) ware there were a couple of sherds, both from the 9th half-metre, one being a coarse thick wheel-made fragment striated on the outside, and the other a sherd painted in brown on the outside, and having the inside both coated with pinkish paint and striated.

Of coarse domestic pottery there was a fair amount in use, some of the vessels being now wheel-made and acquiring a greater development of rim, which in the lower strata was generally straight. But the cooking-pot with splayed-out rim and ribbon-handles, generally broad, is a shape which occurs throughout all levels; the ornamentation of the handles of these pots by means of finger-made impressions is common, being found



FIG. 14.—POTTERY FROM PIT 'F.'

NOS. 1-21, COARSE DOMESTIC WARES. NOS. 1-6, STRATUM I *a*; NOS. 7, 8, STRATUM I *b*; NOS. 9-21, STRATUM II.

NOS. 22-26, UNPAINTED RED WARE FROM STRATUM III *b*. (Scale, *ca.* 3:8, except NOS. 18, 21, *ca.* 1:8, and NOS. 19, 20, *ca.* 1:4.)

at the junction of the handle with the pot, along the rim itself where it approaches the handle, or on the sides of the handle. The rims of small pithoi are also similarly finger- or thumb-indented. Thumb-impressions at the bases of handles are common on unpainted pots of Strata II and I.¹

A bit of a double pot of coarse domestic ware was found in the 6th

¹ They occur on hand-made pots of Period A in the Toumba: Part I, p. 14, and Pl. II.

half-metre (Fig. 14, 20) : abundant soot between the outer and inner walls shewed that it had been used over a fire. A fragment of a similar pot was found embedded in the daub-and-wattle wall of the 12th half-metre, and another in the 12th half-metre of Trench 'A.' These must have been big vessels : the rim-diameter of that from the 6th half-metre is estimated at about 26 cm., but the calculation is a doubtful one. Thus they differ greatly in size from the little 'wash-basins' of like design found at Aegina.¹

Fig. 14 shews profiles, etc. of coarse domestic pots found in 'F.'

A certain amount of coarsely-made, unpainted pottery was also produced from grey clay. This pottery is wheel-made, and prefers the smaller kinds of vessel—chiefly bowls.

Scraped ware (D 6) was plentiful in this stratum ; the 'nest' included the top of a jug and a large part of another pot : this ware is dealt with in detail below (pp. 233 ff.).

Fragments of pithoi were not common ; but there were several bits of the rims of large vessels, both painted and unpainted, as shewn in Fig. 11, 4-10.

Besides these locally manufactured wares, the first ripples of the flood of imported Hellenic products, which subsequently overwhelmed the native industry, were noticed. But black-glazed sherds are still scarce in proportion to native products. Those from the lowest levels of the stratum are good ; the bronze bird level produced fragments of two skyphoi and two good base-fragments. The standard of the glaze falls about the 7th half-metre ; none of the black glaze from the 'nest' level can be described as good, and a lekythos-neck decorated in the B.F. technique is very poor. The total number of Hellenic fragments found is as follows :—

6th and 7th half-metres	.	.	.	34
8th and 9th	„	.	.	28
10th half-metre	.	.	.	1

Hellenic rims, etc. are shewn in Fig. 15.

III a. This stratum, comprising the 4th and 5th half-metres was not so rich in pottery as the foregoing. It is linked to it by the prevalence of similar pottery-types in its lower half, while the upper half is charac-

¹ *Aegina*, Text, p. 441, type 68 : Taf. 120, No. 26, and 123, No. 1s.

terised by scraped ware, and at the same time by the increasing amount of imported wares in use. There are still fragments of jugs with cut-away necks, both of the channelled and of the unchannelled variety; out of



FIG. 15.—HELLENIC AND HELLENISTIC POTTERY FROM STRATA II AND III.

14 bits of rim found, five certainly come from jugs with cut-away necks, and eight were channelled. The 5th half-metre was responsible for 10 of these 14 rim-fragments, but it was in general a more fruitful level than

the 4th, so that it is not safe to assume a diminishing use of these jugs. Of handles of jugs and amphorae there were about a dozen double rolled, mostly painted, in each of the two half-metres, and about half a dozen ribbon. Each half-metre produced a triple painted rolled handle of the simple type formed by combining three single members side by side : and single rolled handle fragments were numerous. There were also a few examples of smaller jug-handles, of vertical rim-handles, and of coarse thumb-imprinted amphora-handles. The local painted wares are not so common, proportionately, as in the preceding stratum, but the 4th half-metre had two examples of the wavy line and one sherd with surrounding bands crossed by another line at right angles. There was one painted sherd with the raised rope-pattern from the 5th half-metre (cp. above, p. 218). A good many small bowl fragments were noted, mostly from the 5th half-metre ; these included specimens of the first and third special fabrics mentioned above (pp. 221 f.).

Each of the two half-metres produced a pithos-rim, one being thumb-impressed. There were also rim-fragments from large pots, as in the preceding stratum.

The rim of what is probably a spouted bowl from the 5th half-metre has been already mentioned (p. 224). There was also part of an unpainted little jug of the type found in Stratum II.

For scraped ware, see below, pp. 233 ff.

Imported Hellenic pottery is plentiful in the 4th half-metre, not so common in the 5th : nor are there any ' trigger ' handles, whereas there is one in the 4th, and they occur frequently in the stratum above. Many of the sherds display very greenish glaze, and in the 4th half-metre there was a red-ware little bowl and a bit of a red-ware plate. Another feature of this level is the presence of tall bases of unpainted or of black-painted ware, which appear to be local productions influenced by the growing vogue for Greek imports. It is curious to find in this context hand-made pottery of the old type ; yet the 5th half-metre produced two rims and a handle from bowls of this kind.

This stratum corresponds to the 3rd and 2nd half-metres of the Toumba. Perhaps, in view of the two house-walls that occur in this stratum, and of the greater affinities of the 5th half-metre with Stratum II and of the 4th half-metre with Stratum III *b*, a further subdivision should have been introduced here ; but there hardly seems, in the absence of a

floor-level, to be enough evidence so to subdivide; the changes in the proportions of the prevalent wares are, however, symptomatic of changes which were taking place in Macedonian modes and manners at this time.

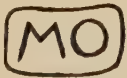
III b. The three topmost half-metres are very definitely characterised by Hellenistic pottery, though this is not so common in the 3rd half-metre as in the other two (relief-ware does not occur in the 3rd half-metre), and scraped ware is still in fair abundance in it. The characteristics of the imported—or perhaps to some extent of the local imitative—wares are tall bases, stamped palmettes, etc., ‘trigger’ handles, moulded (relief) designs, the use of yellow paint on black glaze (late Attic, or, possibly, ‘Gnathian’). Recognisable shapes are plates, skyphoi, pear-shaped vases, kylikes, cups, very small bowls, lamps which date to the fourth or third century,¹ etc. For shapes, see the rough drawing, Fig. 15. Two fragments were executed in the B.F. technique, one being the rim of a plate with a tall rim. There were also a few examples of red ware, but the great bulk of the pottery from this stratum was black-glazed of poor quality, green- or brown-tinged.² Three fragments of relief-ware are probably from ‘Megarian’ bowls, and are not earlier in date than *ca.* 250 B.C.³ Another fragment is the base of an ‘imbricated’ bowl.

A stamped amphora-handle fragment occurred in the 2nd half-metre: this handle is an irregular oval in section, about 0.36 m. wide, made of a reddish-buff clay, neither pronouncedly red nor yellow, full of mica. It bears one extant stamp, an oblong depression in which are two letters, 5 mm. high, in relief. These letters appear to be MO, but if that is so, they are imprinted upside down.⁴ Of the well-known centres from which

¹ Cf. *B.M. Lamps*, Pl. XL., Nos. 36, 38, etc.

² Mr. E. J. Forsdyke, when passing through Athens, kindly gave the benefit of his knowledge upon later Greek pottery.

³ The writer is indebted to Miss M. B. Hobling for a letter on the subject of these relief fragments.

⁴ The stamp reads , with the upper part of the ‘M’ pointing away from

the rim of the amphora. It could, of course, be read sideways, ΟΣ (*oĩnos*?). This combination of two letters does not occur in *I.G.* xii. 1, pp. 175 f. Myres and Richter, *Cyprus Museum Catalogue*, No. 2338, published under ‘Pottery of the Hellenistic Age’ a handle stamped MO, but this is noted (p. 95) as being (unusually) ‘not in relief.’ The portion of *Inscriptiones Orae Septentrionalis Ponti Euxini*, III, in which Olbian handle-inscriptions are due to appear, has not, the writer believes, been published.

stamped amphora-handles emanated,¹ Thasos appears to be the one most likely to have been the source of this handle, although the clay, micaceous indeed, is hardly red enough to answer to the descriptions given of Thasian amphorae. Perhaps it is of local manufacture. There were a few fragments of the usual local painted ware, especially in the 3rd half-metre, including one with raised rope-pattern (cp. above, pp. 218, 230). But local wares are now the exception instead of the rule; they include half a dozen scraped fragments in the 2nd half-metre, and about two dozen in the 3rd: while the old hand-made tradition is still echoed in a couple of cut-away neck rim-fragments, a bit of a bowl with a raking handle, a twisted handle, and a straight rim, all from the 3rd half-metre. A chalk-filled incised sherd may reasonably be regarded as a casual find.

This brings the occupation of the High Table down to some date in the third century, corresponding to Period 'E' on the Toumba. No Roman remains were found, and the later occupation of the site is attested only by a couple of Byzantine sherds, which, along with a modern military button, made memorial of more recent sojourners upon the Toumba and Tables of Vardaróftsa.

COMPARISON OF POTTERY FROM 'F' WITH THAT FROM 'A.'

In making this comparison, it will be advisable to regard only the western half of 'A,' in order to avoid inaccurate deductions from strata which have been, towards the edge of the Table, exposed to the risk of telescoping. Attention being, therefore, confined to evidence from the west half, it is found that the 12th half-metre, the lowest point reached in the excavation of 'A,' yielded pottery of the kinds found in Stratum I *a* of 'F,' on the Toumba in the 6th and 7th half-metres. The 10th and 11th half-metres correspond to I *b*, while the 7th—9th consist of pottery of the 'Nest' type, *i.e.* = 'F,' Stratum II. = 6th—9th half-metres. Above this, digging was by metres; scraped ware and painted wares, with a little imported, occurred in the 3rd metre, while the pottery of the 2nd metre was largely imported, along with scraped ware; and that of the 1st metre mainly Hellenistic. Thus the 3rd and 2nd metres of 'A' correspond approximately to 'F,' Stratum III *a*, and the 1st metre of

¹ See A. Dumont, *Inscriptions céramiques de Grèce*, pp. 7 f., for a description of the various types, clay, etc.

'A' to 'F,' Stratum III *b* : and the following comparative table is arrived at :—

Approx. Date B.C.	Toumba, Half-metres.	" F," Half-metres.	" A," Half-metres.
1000	<i>Period D</i> 8		
	7	16 <i>Stratum</i> <i>I a</i>	12
	6	15	
700		14 13 <i>I b</i>	11
600	5	12 11	10
450 350		9 8	9
		7 <i>II</i>	8
	4	6	7
	3 <i>Period E</i>	5	6
	2	4 <i>III a</i>	5
			4
250-			3
	1	3 <i>III b</i>	2
		2	1
		1	

SCRAPED WARE (D 6).¹

This technique seems to have been applied to not very fine pots; many examples are made of badly cleaned clay, which often contains a large amount of grit. Some indeed are shewn by their smoke-blackened condition to have served the purpose of cooking-pots.

The essential feature of the technique lies in the deliberate scraping away of the slip, leaving a shiny surface exposed in lines. The predominating colour is grey, tending towards black : but red, reddish-brown and yellowish-grey examples occur, and, with the exception of the very red, which are rare, appear to be variations of the same material, differing according to the amount and intensity of firing. It is difficult to deter-

¹ See Part I, p. 30, and Pl. XXII. 8.

mine whether all sherds have received a slip: at any rate the more primitive specimens are merely polished and then scraped. These examples of a rudimentary 'scraped' technique take us back to the origin of the ware, which arose from the ordinary primitive practice—especially common in Macedonia¹—of 'turning' pots in order to remove surface inequalities. It is a characteristic of the later true 'scraped' ware that the marks normally run vertically up and down the sides of the pot: only on rims, or on flat plates, are they horizontal.² Occasional examples of cross-scraping are found. On the three hand-made specimens from Stratum I *a* (cp. p. 211) the scraping appears to have been horizontal to the walls of the pot. These were the only examples of true scraped technique in Strata I *a* and I *b* (except one sherd from the 14th half-metre, which was both wheel-made and vertically scraped, in fact of the regular type found in the higher strata).³

The scraping is generally applied only to the outside of the pot: the stripes vary in width from about 1 to 4 mm. Sometimes an attempt is made to group them in bunches of two or three and perhaps four (see Pl. XV, Nos. 10, 11, 16). The distance between the stripes may be almost nil, *i.e.* they run one into another; or they may be spaced out to as much as 8 mm. apart. The instrument with which the scraping was done is seen from certain specimens—*e.g.* Pl. XV, Nos. 3, 12, 14—to have been of a blunt nature; and we may assume it to have been of wood or bone.

The decorative intention of this technique is well shewn by a rim from 'F,' 6th half-metre (Pl. XV, No. 6); this is from a pot of pinkish-buff clay, which has the stripes well executed and evenly distributed, running up to the rim at a slightly diagonal slant; and the rim itself is decorated with a series of dots corresponding to the stripes, *i.e.* the maker of the pot carried on his tool in the same line each time and so secured a not unpleasing symmetrical effect. This exactly reproduces the brush-technique of a painted sherd from the 9th half-metre.⁴ Another rim has

¹ Note especially the tool-marked B 1 ware, which occurs in Period B of the Toumba, is commonest in Period C, and fairly frequent in D: Part I, p. 17 and Pl. VIII. 2. This ware may well be the source whence the scraped technique was derived.

² The fact that the tool-marks of B 1 ware are vertical, *e.g.* on the urn illustrated in Part I, Pl. VIII. 2, strengthens the belief of a connection between this ware and scraped ware.

³ Cf. p. 212.

⁴ Cf. p. 225, and Fig. 13, 8.

fine strokes arranged in a zigzag, as has also a sherd from the same level, viz. the 4th half-metre. That this technique was practised by the same makers as those of the ordinary painted pottery contemporary with it, is shewn by a sherd from the 5th half-metre, part of the neck and shoulder of a vase: this has the scraped technique on the buff ground of the neck, while the shoulder is decorated with a band of purple paint on the unscraped buff.

Shapes recognised included bowls with a variety of rims, especially rather heavy rounded ones; others were flat, and one was channelled on top; jugs, including small ones of the same shape as that of unpainted and painted ware, and the fine specimen of the hydria type of which the top was recovered from the 6th half-metre; cut-away necks also received this treatment; flattish bowls with handles set slightly slanting, one of which had been used as a cooking-vessel; plates; pots with big rims of various shapes. Handles were frequently rolled, and were set horizontally, or almost so, on bowls, rather than vertically on amphorae. No double rolled handles were found. The 'hydria' has an oval handle, ribbed; another big jug-handle was also oval, with furrows. One fragment apparently comes from a pot which was provided with a lid. Miss Lamb also noticed a vase-fragment of lekythos-shape. The later stages of this ware probably owed much to the inspiration of Hellenic shapes.

The distribution of scraped ware was as follows:—

Half-metres.	Number.	Stratum.
15	3 hand-made	I <i>a</i>
14	1 wheel-made	I <i>b</i>
9	21	II
8	37	
7	6	
6	41 ¹	
5	8	III <i>a</i>
4	46	
3	25	III <i>b</i>
2	6	
1	nil	

¹ The 41 sherds from the 6th half-metre consisted of 15 separate sherds and 10 making up into the hydria-neck and 16 into part of another vase. This figure is therefore not comparable with those of other levels, where the sherds clearly come from many different vases.

It was at its apogee in the 4th half-metre, after which it suffers eclipse and finally disappears.

Fig. 16 shews most of the rims, etc. recovered.¹

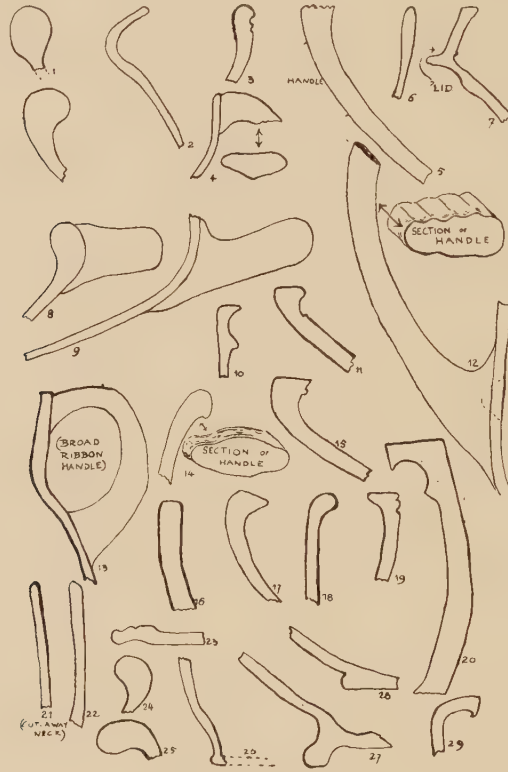


FIG. 16.—PROFILES OF SCRAPED (D 6) WARE FROM PIT 'F.'

Nos. 1-16 from Stratum II; Nos. 17-23, 25, 27, 28 from Stratum III *a*; Nos. 24, 26, 29 from Stratum III *b*. (Scale *ca.* 3:8.)

No. 8 = Pl. XV, 12, No. 14 = Pl. XV, 2, No. 15 = Pl. XV, 6, No. 20 = Pl. XV, 4.

Plate XV illustrates a variety of specimens of this technique, which at times succeeds in rendering a vase distinctly pleasing in appearance,

¹ Approximate ascertainable rim-diameter (external unless stated): No. 1, .123 m.; No. 5, .25 m.; No. 6, .14 m.; No. 7, .184 m.; No. 8 (internal), .22 m.; No. 10, .18 m.; No. 15 (internal), .175 m.; No. 17, .17 m.; No. 18, .067 m.; No. 19, .175 m.; No. 20 (internal), .25 m.; No. 22, .08 m.

and may be regarded as the last attempt of the Macedonian potters to compete with the mass-products of Hellenistic factories.¹

MISCELLANEOUS FINDS.

[References to half-metres in Pit 'F.']

STONE.

Stratum II : 9 (1) : chip, Pl. XVI, 2.

7/8 at depth 3.50 m., by wall : flint arrow-head, *ibid.*, 1.

6 : broken object of micaceous stone.



Scale 1 : 2.

flint saw, *ibid.*, 4.

Stratum III a : 4 : celt, *ibid.*, 7.

Stratum III b : 3 : chisel, *ibid.*, 6.

Unknown provenance : saw, *ibid.*, 3.

Slag : three pieces from Stratum II 7/8.

CLAY.

Stratum I : 13 (1) : pierced sherd-disc, cp. Part I, Fig. 22.

11 : half of similar disc.

Stratum II : 8/9 : spindle-whorl, type 5, cp. *ibid.*, Fig. 21, 17, 18.

8 : top of weight, pierced, like Part I, Fig. 24, 1.

6/7 : spindle-whorl, type 5, cp. as above.²

Stratum III a : 5 : spindle-whorl, type 4, cp. *ibid.*, Fig. 21, 7.

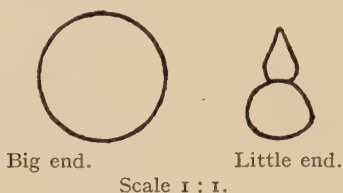
4 : pyramidal weight.

Object of clay, Pl. XVI, 12. This is part of a tapering cylinder

¹ Since the writer returned to England, he has noticed in *Aegina*, Text, p. 441, a reference to a 'local hand-made ware,' type 67, which in many respects seems from the description, and also, so far as can be judged, from the illustration (Taf. 123. 2), to bear resemblance to D 6 ware. Since, however, he has not been able to inspect the ware, and there are grave objections to supposing any connection at all between the two, a mere reference will suffice.

² This type occurs only in Period D on the Toumba, and mostly in the 4th half-metre.

of very hard, dull grey clay, superimposed on which is a rib ending in a sharpened point. Section as drawing :



purpose unknown.¹

Stratum III *b* : 1—3 : spindle-whorl, type 7, cp. Part I, Fig. 22, 20.

Unrecognisable figurine-fragment.

Unstratified Surface-find : Terracotta head, Pl. XVI, 11.

BONE AND IVORY.

Stratum I *a* : 15 (1) : polished bone pin, Pl. XVI, 5 : cp. Part I, Fig. 25, 6.

Stratum III *b* : 3 : ivory fore-arm, Greek, Pl. XVI, 13 ; a finely modelled piece of work : originally grasped some spear-like object.

SILVER.

Stratum III *b* : 1 : portion of rim of vase, .037 diam.

BRONZE.

Stratum I *b* : three small fragments, two perhaps from pin.

Stratum II : unrecognisable fragments from various levels : one perhaps part of plain ribbon-handle of small vase (from 6) : others parts of a curved object, a handle or possibly a fibula (from 9) : a small bit of narrow spiral from 7 (cp. from the Slab-Grave at Chauchitsa, *B.S.A.* xxiv. Pl. I).

7 : fragments of spatula :



Length, .072 m.

¹ Possibly a potter's incising tool : cf. Dar.-Sagl., Art : *Figlinum*, p. 1122, Fig. 3036 (of bone and ivory, from Arezzo). Reproduced by Blümer, *Technologie u. Terminologie der Gewerbe u. Künste bei Griechen u. Römern*, II, 110, and by Richter, *Craft of Athenian Pottery*, p. 85, Fig. 88.

6 : circular button, .035 m. diam., Pl. XVI, 8, with attachment-loop at back. Pierced with holes, of the type illustrated by Casson, from Chauchitsa (Western mound), *B.S.A.* xxvi. pp. 16 (g), 25, Pl. II. 2, e.

9 (1) : a similar button, incomplete. Diam. .03 m. Pl. XVI, 10.

A bird-pendant with suspension-ring, *ibid.*, 9. Beak to tail, .068 m.

Of more developed type than the examples from Chauchitsa, where this widely-distributed form of ornament frequently occurred (*B.S.A.* xxvi. 26, Pl. V.). It is a fat bird, and traces of incised details on body and tail are discernible.

Stratum I b : 2 : miniature pickaxe :



Scale 1 : 1.

IRON AND LEAD.

Stratum II : 9 (2) : tip of iron blade, .042 long.

6 : iron blade, .13 long.

Fragments, including a lump of iron from 7 and 8.

Stratum III b : 2 : 6 iron nails.

2 staples.

Iron fragments (of a lock?).

Iron ring.

Lead object.

All probably from a door.

Bones, animal, at various levels.

Boar's tusks, at various levels.

Stag's antler, 8/9.

Ox-horn, 8.

Shells : at various levels ; cockles in wall of 12 : fresh-water mussels, masses with the pottery of the ' nest ' in 6 : one conical spined shell from 7.

CONCLUSIONS.

The High Table, where tested, proved to have been first occupied in the Iron Age, at some time after the beginning of Period ' D ' on the

Toumba. This date cannot at present be expressly determined, owing to the small area excavated and the lack of adequate ceramic evidence: perhaps *ca.* 800 would be a good tentative dating. The rise in the level of the High Table due to successive occupations, and perhaps too to terracing, was rapid; nearly eight metres of deposit on the Table correspond to only some four on the Toumba. Thus at the time when the first house was built on the site of 'F,' the Toumba was already the commanding landmark that it is to-day, a defensible position suited to become a fenced city of refuge for the dwellers of the Axios plain.

Some time—say, three or four centuries—after its first occupation, its inhabitants, who were now familiar with the products of the Attic potter, though clinging still to the wearing of the ancient bird-amulet of their forefathers, and using for most purposes a local pottery of barbaric aspect, laid down in 'F' a solid layer of clay, and built thereon a wall, which, if not of formidable proportions to an accomplished besieger of cities, is nevertheless of sufficient stoutness to have served as a barrier or breastwork against raiding foes. At any rate, its extant remains seem to indicate that it was something more than a mere house-wall, since the general domestic architecture of the time did not transcend mud-brick walls placed upon one or two foundation-courses of stone. To the east of the wall—outside it, if it be regarded as a town-wall—they made their dwellings, as well as to the west of it; and much pottery had accumulated there, when the houses perished by fire: for above the yellow clay on which the wall stands the earth consisted of the mixed remains of mud-brick houses, the whole covered by a big layer of burnt matter.

It is tempting, when studying the section across 'F' and 'A,' to connect the reddish-yellow clay of the one with that of the other, and to suppose the 'rampart' predicated by Miss Lamb and shewn by her excavation of 'B' to extend round the edge of the Table, to be continuous with the clay upon which the wall in 'F' rests: the whole forming a terrace with a duplicate line of defence. This theory is not, however, supported by the evidence of the pottery; for a great quantity of the pottery typical of the levels above the clay in 'F' occurred below the clay in 'A,' as well as above it. We can only say that the fifth century inhabitants were responsible both for the clay and wall of 'F,' and for

the clay rampart of 'A' and 'B,' and note that in both cases Attic black-glaze pottery is not found below the clay.

If we are to hazard a guess as to the precise period of this apparent fortification, we may note that Thucydides ¹ speaks of the Macedonians of the Axios region as possessing few fortresses at the time of Sitalkes' great invasion of 429. So commanding a place as Vardaróftsa would have been likely to be one of the few selected for fortification; and it may even be that the fireplace which Miss Lamb discovered dug into the rampart was made by sentries at the time of that invasion: for Thucydides tells us that this terror of a month's duration invaded Paeonia amidst the severity of a hard winter. Whether we can go even farther, and identify Vardaróftsa with Idomene, the only stronghold which Sitalkes took by assault, or Europos, which he failed to take, is very doubtful: our present knowledge of the extent of the fortifications and of precise dating (it is unfortunate that no coins were found) for the wall, the rampart, and the burnt layer which separated Stratum II from Stratum I will not permit such speculations.

THE LOW TABLE.

Excavations were carried out in 1925 by Miss Lamb (see plan, Trench 'C,' Pit 'D'), and a further pit ('E') was dug in 1926. The deposit was not deep. 'C,' dug on the south edge, yielded from its top-most metre Iron Age pottery of early types, the most characteristic being fragments of grey cups of 'kantharos' type, twisted handles and cut-away necks being also common. Mycenaean-derived glaze also occurred, and became common in the next metre, in which were found three sherds of C 2 (hand-made matt-painted) and two which appear to be Mycenaean. From 2—2.50 came four Mycenaean sherds, as well as two each of C 2 and Mycenaean-derived glazed ware: the fragments from this level—mainly indeterminate—came from pockets of ashes in otherwise barren yellow clay, which in turn gave place to white sandy soil natural to the site. The only vestiges of habitation in this pit were traces of a clay floor, mingled with scanty burnt matter, at 1 m. below the surface.

Pit 'D' was dug on one of the highest parts of the Low Table. The evidence of its pottery was not very conclusive; most of it was coarse,

¹ ii. 100.

with rope-patterns, and hand-made bowls of A 1 Iron Age type; there was also some Mycenaean-derived glazed ware. The pottery in general suggests an early Iron Age date: here, as in 'C,' there were a couple of intrusive Hellenic sherds, while 'C' was not free from Byzantine percolations as well. 'D' yielded no pottery below 1.15 m. from the surface.

Pit 'E' found virgin soil in places at a metre's depth: it sloped from north to south. Embedded in it were the remains of two pithoi. Other ceramic remains were of the Iron Age.

The inference from the not very conclusive evidence of these excavations on the Low Table is that it was occupied on its southern part before the close of the Bronze Age (Period 'C'); but closer in to the Toumba, towards its centre, it was not occupied until the earlier part of the Iron Age (Period 'D'), and that occupation ceased early in the Iron Age at both points tested.¹

W. L. CUTTLE.

¹ These notes on the Low Table are derived entirely from material furnished by Miss Lamb, supplemented by some memoranda from Mr. Heurtley.

THE MAVRO SPELIO CEMETERY AT KNOSSOS.

(PLATES XVII-XXIII.)

ISOLATED tombs are known all round the site of Knossos, where they help to define the extent of the Minoan city, but the only considerable cemetery that had been found before last year was at Zafer Papoura,¹ north of the Palace and between the Kairatos and the road to Herakleion. A solitary grave (the 'Tomb of the Cow,' a M.M. IIIb jar-burial) was accidentally discovered on the far side of the river,² but search for other sepulchral remains in this region had produced nothing, though fragments of substantial buildings shewed that the town extended up the lower slopes of the eastern hills.³

In the summer of 1926, when Sir Arthur Evans' foreman, Manólis Ākoumianós, was inspecting with the eye of an agriculturist the waste upper slopes which he had bought, north of the dry gorge that cuts down from the Black Cave to the river, he noticed a hewn face of stone which he recognised as belonging to the *diadromos* of a chamber-tomb. Sir Arthur Evans at once excavated this tomb and five others that were soon discovered near it. I arrived while the last of the series was being dug, and Sir Arthur Evans gave me all his material and invited me to finish the exploration of the cemetery in the following year. I was enabled to make the most of the opportunity by leave of the Trustees of the British Museum to spend the necessary time in Crete, by a grant of money from the Craven Fund in the University of Oxford, and by contributions specially made to the British School (*Knossos Tombs Fund*)

¹ A. J. Evans in *Archaeologia* LIX (1906): *The Prehistoric Tombs of Knossos*, i. (cited here as *P.T.* i.). The Royal Tomb (*ibid.*, *P.T.* ii.), the Tomb of the Double Axes and others at Isopata (*ibid.* LXV (1914)) are more than half-way to the sea and may have belonged to the harbour town.

² Evans, *Palace of Minos*, ii. p. 554, and *B.S.A.* viii. p. 88.

³ For the topography see *P.M.*, *loc. cit.* and maps facing p. 547, and *B.S.A.* vi. Pl. XII.

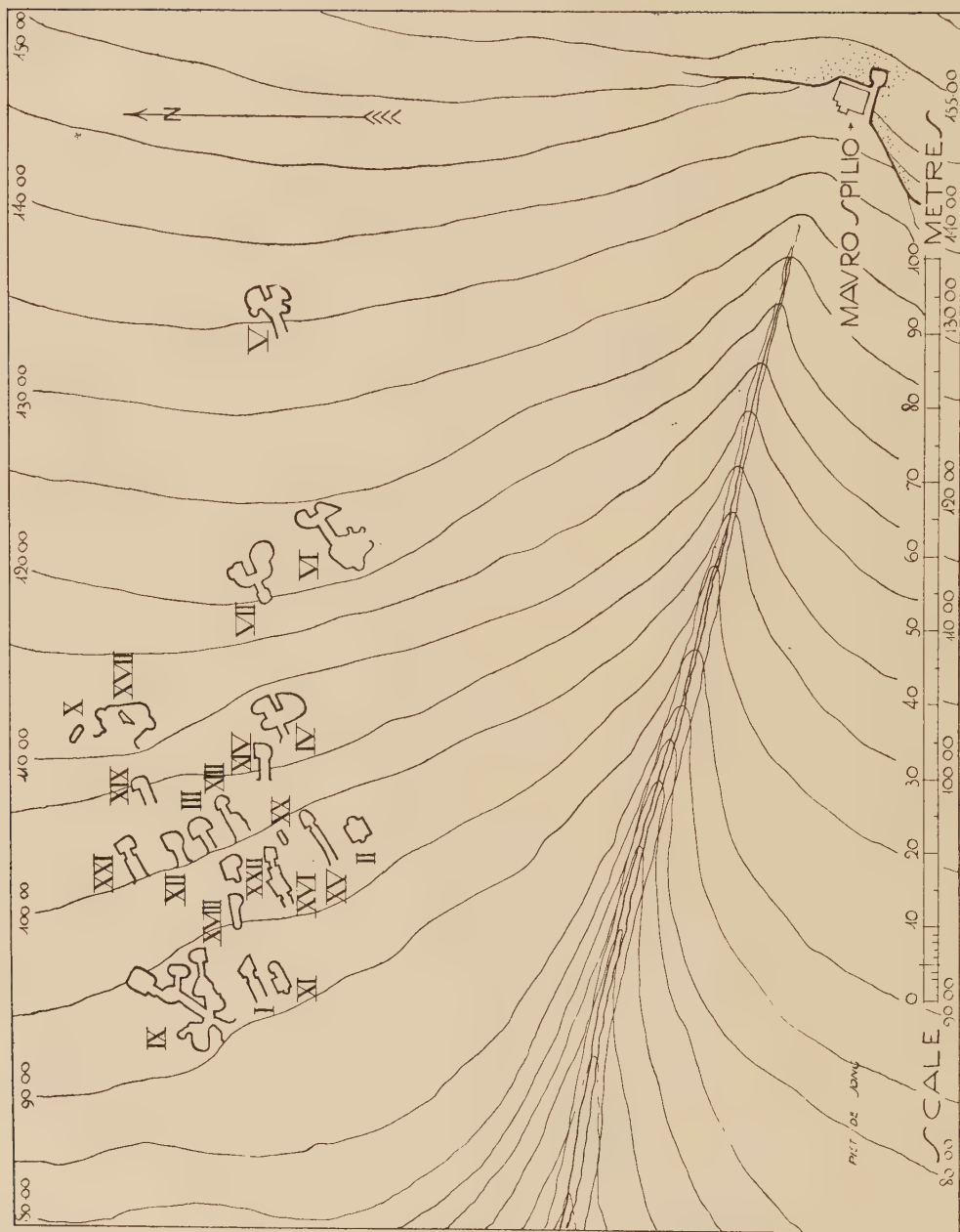


FIG. I.—PLAN OF THE SITE.

by a few subscribers. The Committee of the School gave me the expert services of their architect and draughtsman, Mr. Piet de Jong, and of their Cretan foreman, and the use of tents and equipment belonging to the Villa Ariadne and recently given to the School, with the Villa and the Palace, by Sir Arthur Evans. I was also helped by the advice and experience of Dr. Duncan Mackenzie, Archaeological Curator at Knossos, and of my colleague Dr. H. R. Hall, who stayed in camp with me for several weeks.



FIG. 2.—THE CEMETERY, LOOKING NORTH-EAST. (TOMBS IX AND I IN FOREGROUND.)

THE CEMETERY.

The cemetery lies on the mountain-side some four hundred feet up (Figs. 1 and 2). The slope is roughly terraced here, and the terraces are more or less regularly connected by ramps, which may be ancient. The tombs of the first year (I–VI) were cut in the terrace-walls, generally on the level of the existing terraced-floors. They were easily found by probing or by following the tracks of badgers who inhabited their empty spaces. In the second season the site was methodically trenched to find the remaining tombs (VII–XXII), first in the angles of terrace-walls and floors, where entrances of well-preserved tombs might be expected, then

higher up the walls, where fronts of several collapsed chambers were found, and finally along the terrace-floors, where two different types of tomb appeared, small chambers approached by long descending *diadromoi*, and shaft-graves. The tombs are crowded towards the bottom of the site, a few are scattered on the upper terraces and one (V) stands by itself nearly as high as the cave. Above this height the limestone is bare and precipitous, cropping out in great circular ridges. Cave and gorge have been formed by a spring, now dry in summer, and the cave has been artificially enlarged, apparently in Minoan times, to make a roofed cistern or spring-house which was probably used in connection with the cemetery (Pl. XVII).

Some of the larger tombs are single (I, II, III), but most are double (VI, VII, XVII) or triple (IV, V), and one (IX) has four chambers approached by corridors from a central hall. The chambers of the multiple tombs are separated by buttresses or deep pilasters, which also served to support their roofs. This plan is not a novelty at Knossos, the Tomb of the Double Axes and another at Isopata are double, and the buttress in the former has a column in relief on its front, emphasising its sacred function. The Spata tomb in Attica has three chambers. The entrance-passages of these Mavro Speliō tombs are short, owing to the steep slope of the hill, and those of I and V are perfectly preserved (Fig. 5); I is cut in the soft limestone (*kouskouras*), V is walled with small rough blocks. These two are now fitted with iron gates, and house the *larnakes* and *pitthoi* that were not wanted in the Cretan Museum. The doorways are narrower than the passages, and the chambers have irregular ground-plans with a tendency to curved back-walls. The surviving roofs are roughly vaulted. There are large niches in the walls of V C, IX D corridor, and XVII A, slightly above the floor-levels, but without any indication of their purpose. In the floors of III and IX A are small cavities; the former was empty, the latter contained knuckle-bones of a goat or sheep and pieces of braziers and charcoal. On the right-hand side of XVII B is a deep pit (Fig. 34), which was paved on top with several layers of fragments of large burial-jars and filled with refuse of M.M. IIb date, among which was a piece of iron. This was practically a sealed deposit, and proves in any case that the use of the tomb goes back at least to 1700 B.C. The latest burials here and elsewhere were L.M. IIIb, and series of typical potsherds shew that this tomb and

others like it were in continuous use during the intermediate six hundred years.

The tombs with smaller chambers are always single and are sometimes sunk in the terrace-floors and approached by long descending passages (XII–XVI, XVIII, XIX, XXI, XXII). The long *diadromos* of XVI is cut through the chamber of an earlier tomb which had probably collapsed. These contained no M.M. material and are probably a L.M. type. The later workmen seem to have been shy of hard patches in the rock; they cut round such obstacles or dug irregular shaft-graves beside them (X, XI, XIII). Rectangular shaft-graves large enough to hold a *larnax* were dug separately (XX) or sunk in the entrance-passages of chamber-tombs (XIII, XV). Walls of small rough stones doubtless closed the doorways of all the chamber-tombs, but only two were found in place (XV, XVI, Fig. 30). There are small cavities in the floor on each side of the doorways of XXI and XXII, but again no evidence of their use.

Remains of the large jars (*pithoi*) that generally served for coffins in M.M. times were found in IX and in the pavement over the pit in XVII B. There were two oval pottery coffins with flat lids in IX D and E, M.M. types which apparently remained in use throughout the L.M. period. The coffins from other tombs are ordinary L.M. chests (*larnakes*) with high gabled lids, like those of Zafer Papoura. The three coffins that stood together in XVII B (Fig. 33) were resting irregularly on a layer of grave-earth some thirty centimetres thick, which had accumulated since the M.M. II. filling of the pit. Two of these contained bones, and other bones were held between the inner *larnax* and the back wall (Fig. 34), having evidently been thrown out when the coffins were cleared for fresh interments. The M.M. *larnakes* in IX also stood on deep grave-earth containing potsherds, beads and other small objects which had been overlooked in the periodical clearances of funeral furniture. Refuse from IX C was heaped against the opposite wall of the central corridor. It is likely that these floor-deposits were repeatedly searched for jewels, and the position of potsherds in them shewed that the stratification has very little chronological value. In several tombs the filling was also composed of silted mud or fallen rock. Chambers B and E of IX were utterly collapsed and had to be dug out from above; A, C and D were filled with fine mud to within a few inches of their roofs. The fronts of

many tombs had fallen away and the earth above the Minoan interments was packed in some instances with Geometric jar-burials of infants (IV, VII, XVII). The L.M. III. *larnax* in XVII A was cut off at about two-thirds of its height to make room for these Geometric *pithoi*. A large limestone slab (Fig. 7), found lying on the floor of IV A, is thought by Sir Arthur Evans to have been perhaps a tombstone.¹ He refers to the incised and painted tombstones found by Tsountas in chamber-tombs at Mycenae,² and to the roughly-shaped idol-stones recently identified by the Swedish Expedition in what seems to have been a cenotaph at Dendra,³ where the other finds consisted of sacrificial relics. The knuckle-bones and charcoal in the central cist of Tomb IX of the Mavro Spelio cemetery suggest a similar sacrificial rite. It is noteworthy that the burial of a dog in this tomb, which can hardly have been accidental, also has its counterpart at Dendra.⁴

THE CAVE.

The Black Cave (*Μαύρο Σπήλαιο*) is the name by which most Cretan caves are known in their own neighbourhoods, and this one at Knossos has no other name. It was originally the mouth of a spring in an angle of the limestone ridges that begin to crop out at this height, and its water has cut the deep gorge, now dry in summer, which forms the southern boundary of the cemetery (Fig. 1). Its present form (Fig. 3) is mainly artificial, and consists of a large and nearly rectangular outer chamber and a small and less regular inner cavern merging into the natural water-channel inside the hill. The inner cavern or cistern has a sunk floor separated from the outer by a stepped sill, across which the overflow was conducted in a narrow gutter. The outer chamber (Pl. XVII) also has a sunk floor, but the sill is carried round the apartment and makes a convenient seat, which was probably its original purpose. The slight gutters behind and across this bench and the arms at ends and angles would serve to keep it dry. The middle of its open side is cut out rectangularly as if to mark the outlet for the water. It seems likely from the returns at each end that there was a built front, perhaps a doorway between columns,

¹ Sir Arthur Evans proposes to discuss these instances, together with the tombstones from the shaft-graves of Mycenae and elsewhere, in a forthcoming paper.

² 'Αρχ. 'Εφ. 1888, p. 127, 1896, p. 1.

³ A. W. Persson, *Kungagraven i Dendra*, p. 146.

⁴ Persson, *ibid.* p. 131.

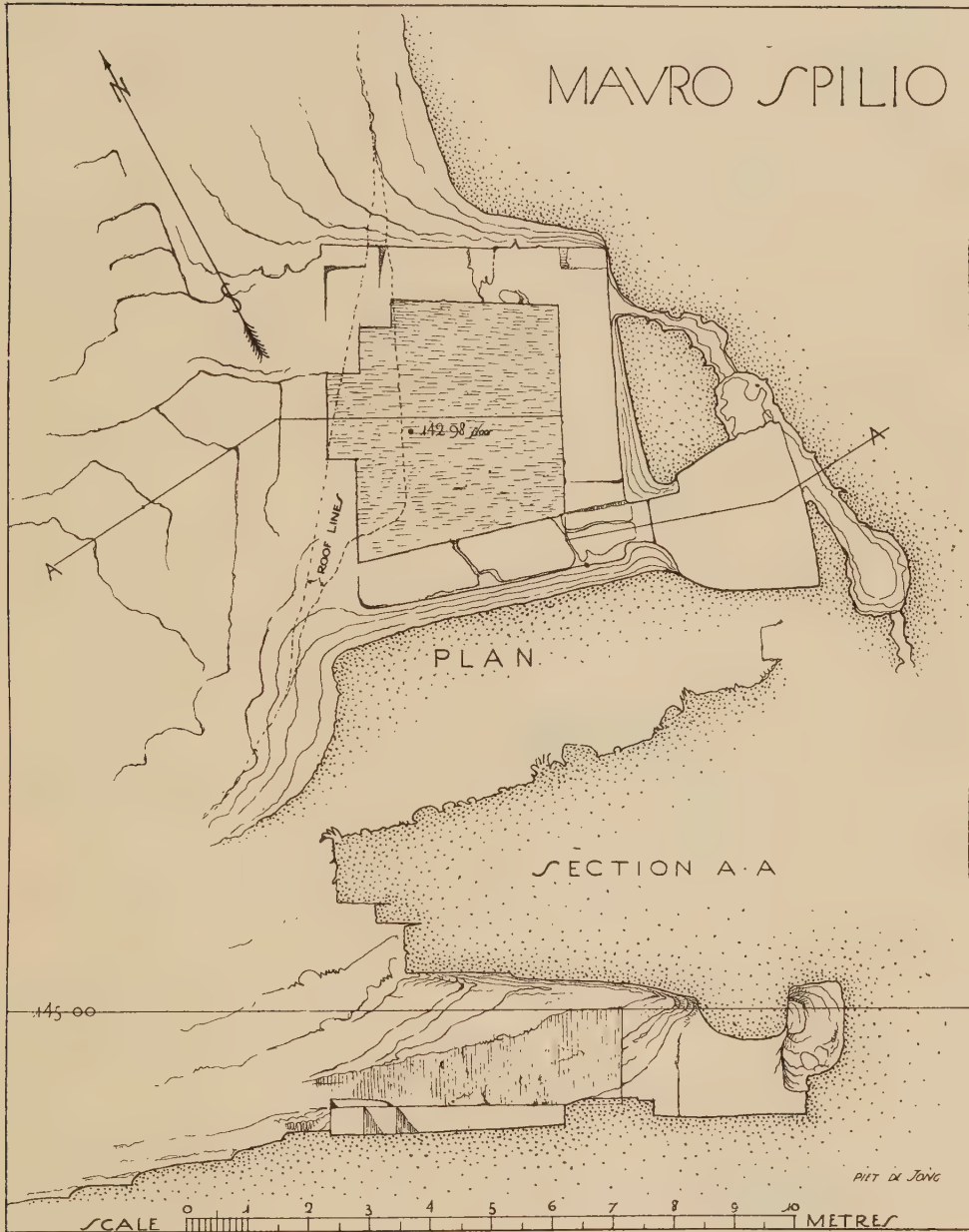


FIG. 3.—THE CAVE.

which carried the flat hewn roof, now fallen away along its edge. Two worked stones found in the filling, and recognised by their oblique cutting as Minoan, must have belonged to a structure here. The rocky slope outside is roughly stepped in two directions, north towards the cemetery and west, downhill, to the gorge.

Both chambers were nearly full of earth, but the finds were few, potsherds were mostly indeterminate, though some were evidently not prehistoric. A single fragment of a small terracotta votive goddess is archaic Greek. The only certain and significant Minoan objects are a decayed gem and part of a M.M. III. double-curved pottery cup, black-glazed and with string-marked base (Fig. 47). There are also the two building-stones, which may be Minoan, of truncated pyramidal form measuring $19 \times 20 [21.5] \times 28$ cm. It is possible that the Minoan material was introduced at a later period, but it is not likely that the cave was so laboriously shaped in Greek or Roman times, since it stands far above the inhabited valley, where water is abundant, and must have been a sanctuary or a spring-house used for funeral rites. The inner cavern was the reservoir, the outer chamber, which would not hold any depth of water on its floor, may have served the same purpose as the sunk lustral areas of Minoan palaces. Such spring-houses, as the votive offerings prove,¹ preserved their sanctity through the break between Minoan and Hellenic cultures, and it is significant that this example shews the same principles of construction as Peirene and other fountains of classical Greece.

TOMBS AND CONTENTS.

I (Fig. 4).²

Single chamber-tomb, sharply cut and perfectly preserved; in a steep slope, with very short *diadromos* (Fig. 5). The top corner of the left-hand wall was visible before excavation, and gave the clue to the cemetery. Floor-deposit 50 cm. deep.

- I. 1, Marble bird's-nest bowl, particoloured grey and white, round shoulder, undercut inside (Pl. XX).

¹ In the spring-chamber recently discovered near the south-west entrance of the Palace, *P.M.* ii. p. 134.

² *P.M.* ii. p. 555, Fig. 351.

Pottery.

I. 2, Brazier, shallow dish with downward-pointing poke-handle, rough red ware (Pl. XXII).

I. 3, Brazier, deep body with flat rim and level handle, pale brown ware (Pl. XXII).

Also fragments of other braziers, one exceptionally large with bowl 22.5 cm. across.

I. 4, Fragments (2) of black-washed ware, perhaps M.M. III.

I. 5, Shallow curved cup with vertical band-handle, red-washed.

I. 6, Conical cup, light red clay unpainted, and fragments of at least 6 similar cups (Pl. XXIII).

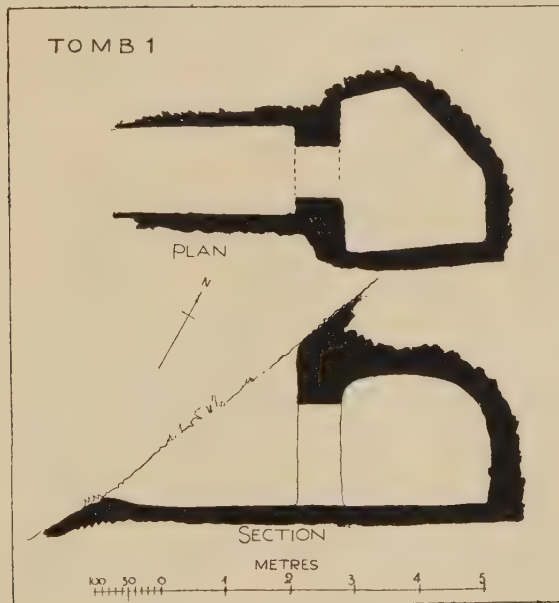


FIG. 4.

II.

Apparently as I, but with collapsed front.

II. 1, Stone (grey steatite?) bird's-nest bowl with two opposite double-ribbed petals in relief (Pl. XX).

Pottery.

II. 2, Brazier as I. 3.

II. 3, Conical cup, rough red ware (Pl. XXIII).

III.¹

As I, but with side and back walls rounded in a continuous curve; the front collapsed. There is a small cavity, 30 cm. deep, nearly in the middle of the floor. The collapse was probably ancient, since the finds were exceptionally numerous.



FIG. 5.—TOMB I, ENTRANCE.

- III. 1, Gold beads (2), flattened globe and gadrooned barleycorn (Pl. XVIII and Fig. 39).
- III. 2, Gold-cased bronze spiral hair-ring of three coils (Pl. XVIII).
- III. 3, Silver earring, swelling hoop (Pl. XVIII).
- III. 4, Bronze knife, long narrow blade with curved back (Fig. 6).

¹ Plan in *P.M.*, *loc. cit.*

- III. 5, Bronze razors (2), square-cut ends (Fig. 6).
 III. 6, Bronze tweezers as V. 4, but longer and broken. Present length 13 cm.
 III. 7, Bronze mirror-disc, pair of holes at edge (Fig. 6).
 III. 8, Bronze scale-pans (2) fragmentary, square-section scale-arm (?) fragmentary, and scale-handle (?) like a miniature sword-hilt (Fig. 6).
 III. 9, Lead weights (3), two circular and flat, one glandular and grooved underneath (Fig. 6).



FIG. 6.—BRONZE IMPLEMENTS, SCALES AND LEAD WEIGHTS, TOMB III.

- III. 10, Ivory knife-pommel, boss with square hole in flat surface. Diam. 2 cm.
 III. 11, Faience bead, blue reeded cylindrical.
 III. 12, Carnelian beads (13), short cylindrical (Pl. XVIII, 6).
 III. 13, Carnelian gem, glandular: man and lion (Pl. XIX).
 III. 14, Crystal lenses (2), plano-convex, as VII A. 13. Diam. 1.5 cm.
 III. 15, Lapis-lazuli spacing-bead, flat cruciform with double perforation (Pl. XVIII, 20 and Fig. 39).
 III. 16, Stone (slate or steatite?) whorl-bead, button or pinhead, incised ladder-bars on top (Fig. 40). Diam. 3.3 cm.
 III. 17, Stone (mottled green serpentine?) bird's-nest bowl, flat lip and foot with roll edges, circular hole in shoulder for separate spout (Pl. XX).

- III. 18, Stone (grey and white veined marble) pointed oval libation-vase with pierced base and separate neck, broken but nearly complete (Fig. 42). Ht. 23 cm.
- III. 19, Stone (grey steatite?) bird's-nest bowl, reeded spirally (Pl. XX).
- III. 20, Stone (grey and white marble) bird's-nest bowl, four petal-lugs on shoulder (Pl. XX and Fig. 41).
- III. 21, Stone bird's-nest bowls (2), grey, six double-ribbed petals in relief, as XII. 1.
- III. 22, Stone conical cup, grey, rotted (Pl. XX).
- III. 23, Stone cylindrical cup, grey, two irregular grooves at base, three below notched lip (Pl. XX).
- III. 24, Stone (black marble veined red and white) bird's-nest bowl, raised lip (Pl. XX).
- III. 25, Terracotta idol, woman's body on cylindrical base, features and clothes painted in L.M. pottery technique (Fig. 43). Ht. 8.2 cm.

Pottery.

- III. 26, Brazier, conical dish with pierced globular centre, handle and tripod-legs missing, rough red ware (Pl. XXII). Also fragments of other braziers; among them two pieces with unfixed red, white and blue painting as V. 13.
- III. 27, Cup as I. 5.
- III. 28, Two-handled flask, light brown clay, dark brown glaze; globular body with three concentric rings of curve-hatching on each side around a rosette of barred petals, papyrus-lily flowers below barred handles; poor style. Ht. 26 cm. L.M. III.

IV.

A double or perhaps triple chamber-tomb, as V, but collapsed in front; only the back wall and a central partition-buttress are clearly defined. High in the fallen earth were 14 Geometric jars containing fragments of infants' bones (unburnt) and small black-washed cups and jugs. On the floor of the right-hand chamber were pieces of a L.M. III. *larnax*, and on the right of this, 40 cm. above the floor, a similar *larnax* slightly broken. A stone slab, 3 feet long (Fig. 7), lay on the floor of the left-hand chamber; I supposed that it had fallen from the doorway, but the walling found in position elsewhere was built with small rough stones, and Sir Arthur Evans (who has supplied this recent photograph) thinks that it may have been a tombstone.

- IV. 1, Gold-cased stone bead, cylindrical (Pl. XVIII).
- IV. 2, Bronze beads (4), open cylindrical, fragmentary (Pl. XVIII, 25).
- IV. 3, Faience beads (3), blue cylindrical.
- IV. 4, Glass beads, globular (8), glandular (1).
- IV. 5, Amethyst beads (3), globular (Pl. XVIII, 4).
- IV. 6, Carnelian gem, glandular, rectilinear device (Pl. XIX).
- IV. 7, Carnelian beads, cylindrical (5), globular (1) (Pl. XVIII, 6).
- IV. 8, Crystal pendant, smoky, shell (Pl. XVIII, 15 and Fig. 40).



FIG. 7.—LIMESTONE SLAB, TOMB IV A.

- IV. 9, Jasper gem, red, lenticular : stylised cuttlefish (Pl. XIX).
- IV. 10, Lapis-lazuli bead, faceted, tubular, broken.
- IV. 11, Steatite gem, grey, glandular : rectilinear device (Pl. XIX).
- IV. 12, Steatite gem, grey, lenticular : stag with bird (Pl. XIX).
- IV. 13, Steatite beads (3), grey, cylindrical, whorl and lenticular.

Pottery.

- IV. 14, *Larnax*, oblong chest with single sunk panels on sides, nearly complete, and fragments of another.

IV. 15, Shallow curved cup with vertical handle.

IV. 16, Similar cup, but with two horizontal handles.

Also fragments of braziers and of L.M. III. plain and painted pottery, including at least two large jars with octopus-loops on body.

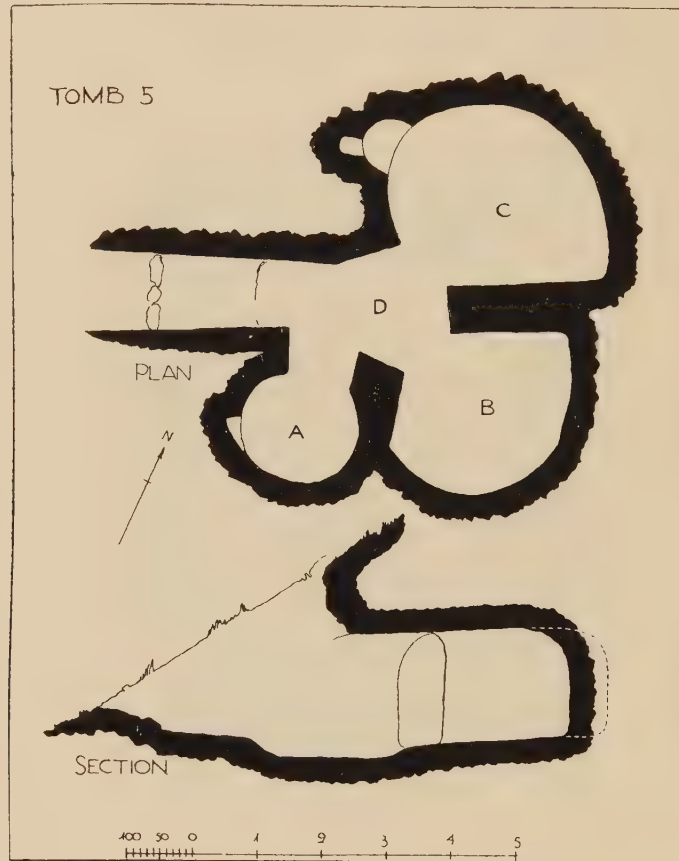


FIG. 8.

V (Fig. 8).

A triple tomb, well preserved. The walls of the short *diadromos* are faced with loose masonry of small stones. The large niche in the wall of C contained a single skull, probably put there by the ancient intruders who disturbed the latest burials. The depth of grave-earth varied with the level of the floor, from 5 cm. in the middle of B to 32 cm. at the entrance of A, and several lumps of rock had fallen from the roof. There

were pieces of *larnakes* in each chamber, and others had been thrown out, for parts of at least eleven lids are included in the fragments, which certainly do not represent the whole remains of that number of chests. The best preserved *larnax* (12) stood in the middle of C and was covered with the broken base of another. It contained two small bronze rings (V. 5), a pottery cup (V. 19) and a false-necked jar (V. 20). Since the other finds were scanty and insignificant, I have not noted in this report the compartment in which each piece was found.

- V. 1, Bronze arrowheads (2), flat and barbed, like those from the Hunter's Grave at Zafer Papoura.¹ L. 3.5 cm.
- V. 2, Bronze knife as III. 4, decayed.
- V. 3, Bronze needle. L. 7.8 cm.
- V. 4, Bronze tweezers, exceptionally well preserved, with lustrous grey patina (Fig. 38). L. 7.2 cm. Also fragments of others, decayed.
- V. 5, Bronze wire rings (2).
- V. 6, Bronze bead, open cylindrical (Pl. XVIII, 25).
- V. 7, Faience fragments, apparently of two bowls, white or yellow ground, designs in green or black: petals, rays, dots and rectilinear patterns, spirals on one lip. Small and decayed (Figs. 9 and 47).
- V. 8, Faience beads (2) yellow, fluted oblate disc (Pl. XVIII, 13), and glandular.
- V. 9, Glass cone, perished.
- V. 10, Flint arrowhead, shape as V. 1. L. 2.8 cm.
- V. 11, Stone whorl-bead (Pl. XVIII, 7).

Pottery.

- V. 12, *Larnax* from C and lid from A. The *larnax* has single sunk panels grooved at top and outlined with red-black paint. At the top of each end is a flat lug pierced vertically for tying on the lid. The lid (which does not belong to this chest) has a high gabled top with projecting ridge-ends, as XI. 1 and XVI. 2, and two vertical loop handles on each long side. Also fragments of other lids (at least 10) and *larnakes*, a few painted with common L.M. III. patterns, spiral coils, alternate curve-hatching, oval petals, and papyrus flowers.²
- V. 13, Brazier, pale brown clay decorated outside with a petal-pattern in unfixed blue and red colours (Fig. 45).
- V. 14, Brazier, deep body with roll-moulding at foot (Pl. XXII).
- V. 15, Base of cup, black-washed, with whorl string-mark, as IX A. 4.
- V. 16, Tall alabastron painted with network of hanging loops (Fig. 10). Ht. 11.2 cm.

¹ *P.T.* i. p. 32.

² For the types of ornament see *P.T.* i. Fig. 102.



FIG. 9.—LIP AND
BASE OF FAIENCE
BOWLS, TOMB V, 7.



FIG. 10.—L.M. II. JAR,
TOMB V, 16.



FIG. 11.—L.M. I. BOWL,
TOMB V, 17.



FIG. 12.—L.M. IIIb FALSE-NECKED JAR, TOMB V, 20.

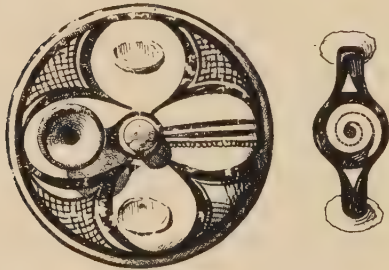


FIG. 13.—L.M. IIIb TOP OF FALSE-NECKED JAR, TOMB V, 21.

- V. 17, Squat alabastron with three handles, painted latticed lobes springing from handle-bases, plain base (Fig. 11). Ht. 11.5 cm.
- V. 18, Shallow curved cup with ring-handle, painted spiral coil inside base.
- V. 19, Wide carinated cup with vertical handle, painted four quadruple loops on upper curve.
- V. 20, False-necked jar, painted octopus on body (Fig. 12). Ht. 10 cm.
- V. 21, False-necked jar, painted latticed triangles and chain in handle-ring (Fig. 13). Ht. 11 cm.
- V. 22, Small two-handled jar.
- V. 23, Unpainted braziers and conical cups and many fragments of painted L.M. III. ware, some with large octopus-loops.

VI (Fig. 14).

An oddly shaped double chamber-tomb below the existing terrace level. In the second season I cleared away the terrace-floor in search of the original entrance-passage and found a sort of forecourt, filled with earth containing numerous M.M. potsherds. These were probably refuse from the tomb, but the earth had evidently fallen from the hillside in a landslip in the middle of M.M. III. which closed the tomb so effectually that it was not used again. None of its contents is later than M.M. IIIa, but the absence of valuable articles and the fragmentary condition of the pottery indicate that the systematic clearance of funeral furniture which is apparent throughout the cemetery was practised at this early date.

VI. 1, Jasper gem, green, lenticular: stylised cuttlefish (Pl. XIX).

VI. 2, Stone fragment, black, from lip of bird's-nest bowl.

Pottery.

- VI. 3, Round-mouthed jug, roll-moulding at neck, three flat ribs on body, black-washed and painted red bands on neck-roll and above ribs, white dots on shoulder; lip and most of foot missing (Fig. 49).
- VI. 4, Pinched-mouth jug, painted black bands on brown clay (Fig. 49).
- VI. 5, Tall two-handled jar, rough red ware. Ht. 31 cm. Also many fragments of similar jars, one painted spiral coils in white.
- VI. 6, Conical cup, tall, rough brown ware (Pl. XXIII).
- VI. 7, Cup as last but with flat rim (Pl. XXIII).

Other fragments include poke-handles of braziers, handles, spouts and bases of bridged-spout jars as IX A. 7, pieces of white-dotted black cups as IX A. 5, a black-washed sherd with moulded spiral coil, and the rim of a large basin as XVII P. 39.

VII (Fig. 15).

A double chamber-tomb with collapsed front. In the earth above the grave-deposit in each chamber was a Geometric jar-burial. The

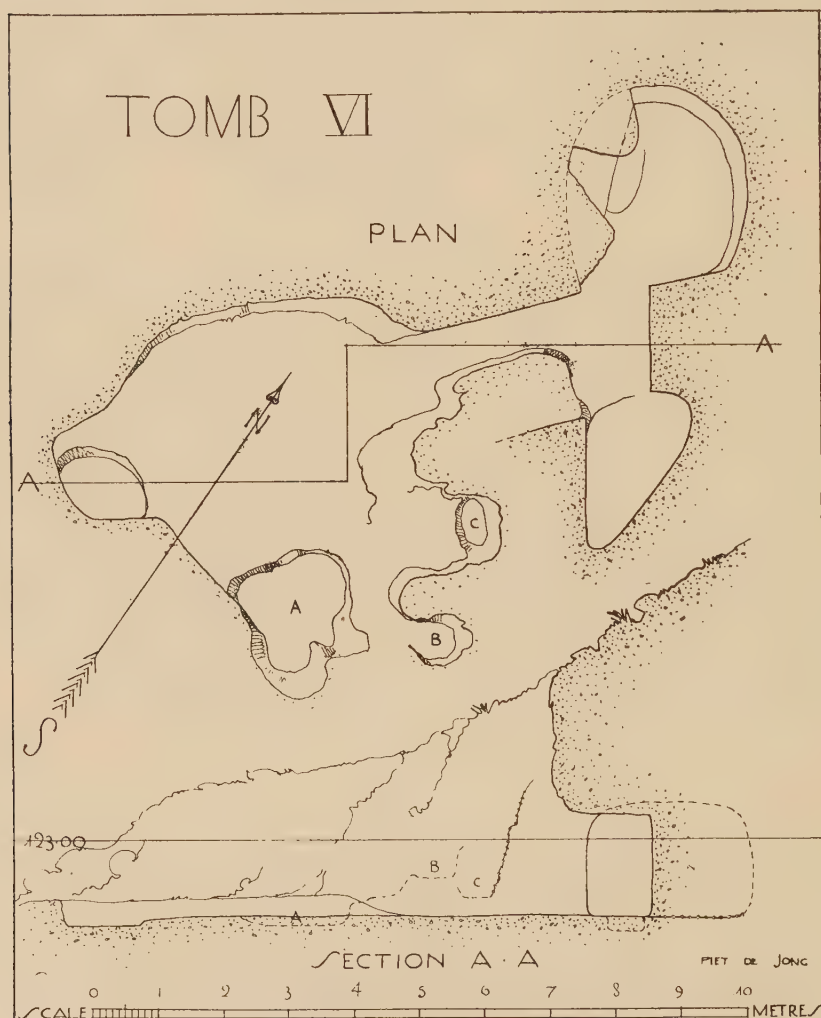


FIG. 14.

grave earth was about 30 cm. deep and was covered with smashed *larnakes*. A view of B cleared to this level is typical of the condition of the latest

Minoan burials (Fig. 16). Nearly all the finds were made in the earth between the *larnakes* and the floor.

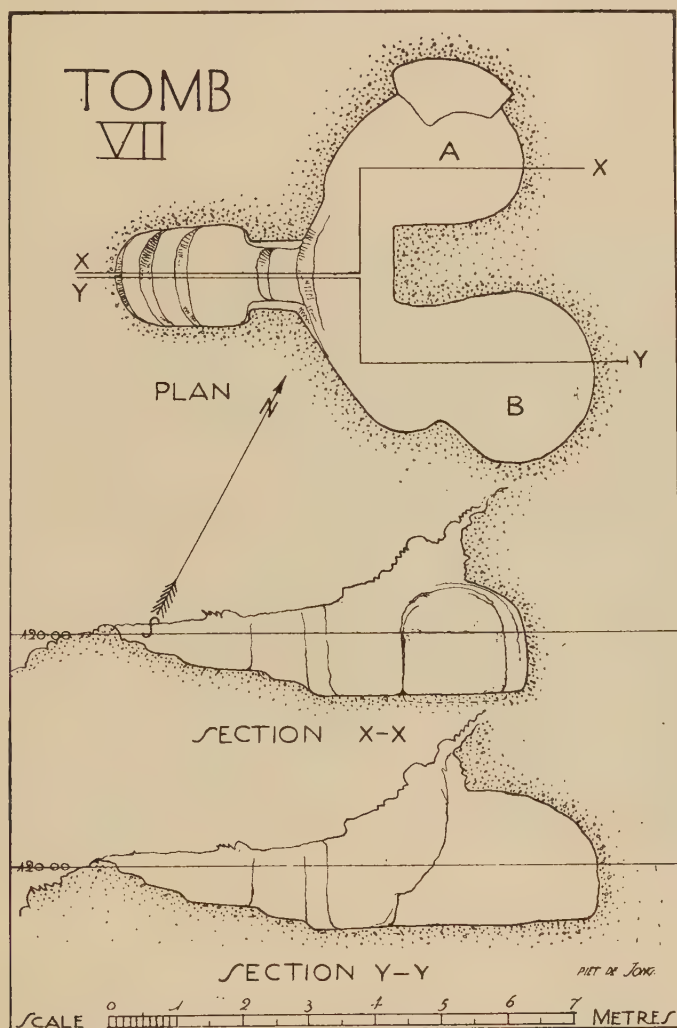


FIG. 15.

A.

VII A. 1, Gold earrings (2, odd), swelling hoops with pendent granulated cones (Pl. XVIII).

VII A. 2, Gold bead, barleycorn as III. 1, split (Pl. XVIII).

- VII A. 3, Bronze beads (4), globular (Pl. XVIII, 25).
 VII A. 4, Bronze finger-ring with oval bezel, corroded.
 VII A. 5, Bronze ring, plain wire.
 VII A. 6, Bronze bead, tubular spiral wire.
 VII A. 7, Bronze pin, hook-head, as IX B. 2, broken. L. 12.7 cm.
 VII A. 8, Bronze tweezers, perished.
 VII A. 9, Bronze knife, oval.
 VII A. 10, Faience beads, thick discs (32), brown and white (Pl. XVIII, 24); blue melon (1).



FIG. 16.—TOMB VII B, AFTER CLEARANCE OF FALLEN EARTH.

- VII A. 11, Glass beads, yellow (3), globular (Pl. XVIII, 28).
 VII A. 12, Carnelian beads (2), oval and globular (Pl. XVIII, 6).
 VII A. 13, Crystal lens as III. 14, but larger (Fig. 40). Diam. 2.1 cm.
 VII A. 14, Marble cylinder-seal, pink, engraved human and animal figures, Hittite (Pl. XIX).
 VII A. 15, Steatite gem, grey, lenticular, engraved lattice both sides (Pl. XIX).
 VII A. 16, Steatite pendant, grey, cockleshell as IV. 8, chipped corner.
 VII A. 17, Steatite pendant, grey, bull's head (Pl. XVIII, 10 and Fig. 40).
 VII A. 18, Steatite pendants (2), grey, triangular (Pl. XVIII, 9, 11, and Fig. 40).
 VII A. 19, Steatite pierced whorl or button, grey.

VII A. 20, Steatite whorl-beads (2) (Pl. XVIII, 7).

VII A. 21, Steatite miniature bowl with spout and handle, black (Pl. XX).

VII A. 22, Stone (grey and white marble) bird's-nest bowl, miniature.

Pottery.

VII A. 23. Brazier, upward-pointing poke-handle, originally blacked and painted white, petals inside and out (Pl. XXII and Fig. 44). M.M. II. or III.

VII A. 24, Brazier, deep body with roll-moulding below lip (Pl. XXII).

VII A. 25, Hollow cylindrical stand with flat pierced top, broken (Fig. 46).

VII A. 26, Band-handle of cup, black-washed. M.M. III.

VII A. 27, Curved bowl (2 fragments), painted blunt leaves in black on pale brown clay (Fig. 17).



FIG. 17.—L.M. Ia POTSHERD,
TOMB VII A. 27. ($\frac{1}{2}$ Scale.)



FIG. 18.—L.M. II CUP,
TOMB VII B. 13 (restored).

VII A. 28, Conical jar, miniature, one handle on rim, one lost, painted filled zigzag below lip (Pl. XXIII).

Also pieces of plain painted L.M. III. pottery and *larnakes*.

B.

VII B. 1, Gold earring as VII A. 1, but heavier and with ball at end (Pl. XVIII).

VII B. 2, Gold finger-ring, narrow hoop with ribbed edges, flat oval bezel with five applied ornaments (Pl. XVIII and Fig. 38).

VII B. 3, Gold beads (3), globular (Pl. XVIII).

VII B. 4, Carnelian prism-bead, two faces engraved rectilinear designs, one blank (Pls. XVIII 17, XIX and Fig. 39).

VII B. 5, Steatite gem, grey, lenticular: two men with double shields (Pl. XIX).

VII B. 6, Steatite gem as last, woman between spear and snake (Pl. XIX).

VII B. 7, Stone (white-veined grey marble) bird's-nest bowl, deep as IX D. 7.

VII B. 8, Stone (grey steatite?) bird's-nest bowl as XII. 1.

VII B. 9, Terracotta idol, body of woman holding male infant vertically, cylindrical base; painted stripes and bars in L.M. pottery technique (Pl. XXI). Ht. 10.5 cm.

VII B. 10, Natural shell, conch, broken.

VII B. 11, Ore, black, 4 small pieces (galena, sulphide of lead, for eye-paint).

Pottery.

VII B. 12, Conical cup with foot, rough red ware (Pl. XXIII).

VII B. 13, Cup with handle, red flowers, fragmentary (Fig. 18). Ht. 5.4 cm.
L.M. II.

VII B. 14, Miniature alabastron, red-washed (Pl. XXIII).

VII B. 15, Miniature alabastron, painted quadruple dotted stripes (Pl. XXIII).

VII B. 16, Round-mouthed jug, knob handle.

VII B. 17, Trefoil-mouthed jug, globular body painted broad cross-bands
(Fig. 16, in *larnax*).

VII B. 18, Flanged disc lid, painted rosette, pierced centre.

Also plain conical cups and plain and painted fragments of
L.M. III. ware.

VIII.

No tomb.

IX (Fig. 19).

A multiple chamber tomb of unique plan and furniture. Its doorway is now a hole in a nearly vertical rock face, like the entrance of a cave, but hewn or built *diadromos* walls may well have perished. The interior comprises a central hall (A) and four chambers (B, C, D, E), of which B and D are approached by passages long enough to be called corridors; E and the corridor of D each have niches in their walls; A has a small cavity in the middle of its floor, which contained some small knuckle-bones, charcoal, and pieces of one or more coarse red pottery braziers. The roofs of B and its corridor and E had fallen, and these compartments had to be dug out from the top. Legs of a L.M. III. *larnax* lay in the filling of B corridor, and part of its body was found just below the surface of the ground above; it must have fallen down the hill from a higher tomb soon after the collapse of this. A, C and D were nearly full of mud. An oval *larnax*, containing a few bone-fragments but no skull, stood obliquely in the middle of D on about 25 cm. of grave-earth, and in the niche of E was a similar *larnax* (Fig. 20), with the two halves of its flat lid inside it, standing on 65 cm. of earth, of which the upper 35 cm. was silted mud, the lower 30 cm. grave-deposit containing the skull and leg-bones of a dog. The silted layer was 50 cm. thick,

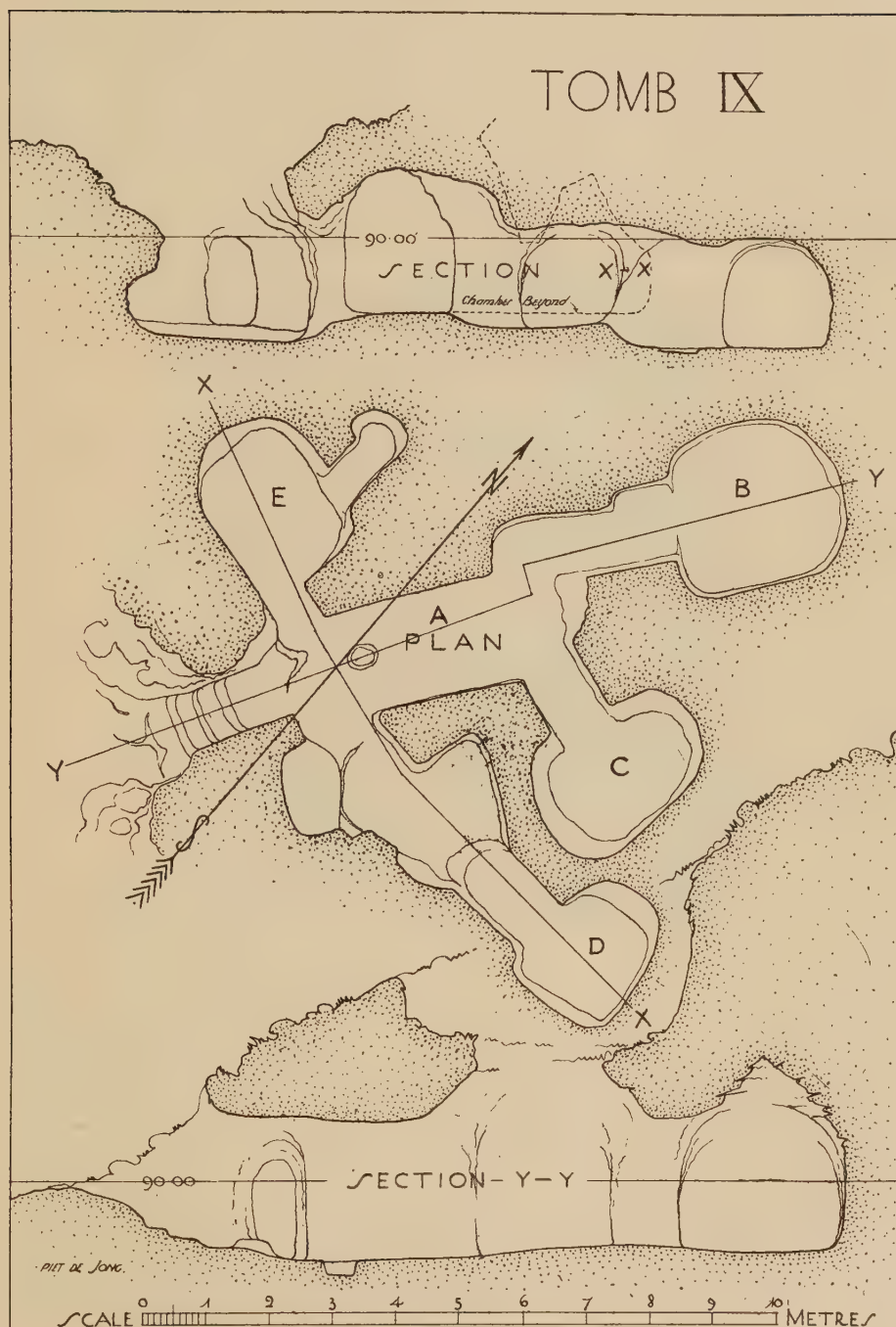


FIG. 19.

so that the larnax was embedded in it and may have been floated to that position by the storm-water that brought the mud. Above the mud was another stratum of grave-earth 20 cm. thick, then fallen roof. This stratification was found all over E, with some variation in the depths of the grave-earth, but no significant differences could be detected in the scanty finds from these two layers, and though it is evident that the lower was deposited before the upper, it is not certain that its composi-



FIG. 20.—M.M. *LARNAX* AND LID, TOMB IX E. 8.

tion was entirely later, since the upper layer may have been shovelled into place from the entrance-passage, where there was no grave-earth on the floor. Falls of roof had often occurred in this chamber, and lumps of rock were found in every stratum. Proof of disturbance of the grave-earth was noted, for instance, in A, where the M.M. III. vase-handle IX A. 7 was found 50 cm. above the floor at the far end of the left-hand wall, and among the sherds below it were two L.M. III. plain conical cups and the foot of a L.M. III. goblet. The deposit was heaped high towards this side of B corridor, having apparently been cleared out of C, which

contained very little burial material. Remains of burial-receptacles, *pithoi* and oval *larnakes* found in the entrance of B, probably represent the original funeral furniture of other chambers. The most valuable find, of gold beads and signet-rings, was made low down (12–20 cm. above the floor) against the north wall of E, near the niche. Five flattish fragments of stone lay on the floor along this wall, as if to make a level bed for a corpse or coffin. The other finds in this large tomb were exceptionally few and poor.

A.

Pottery.

- IX A. 1, Brazier, as XXI. 2. Also fragments of similar braziers, a base and parts of body, with knuckle-bones and charcoal from shallow cist in floor.
- IX A. 2, Hollow cylindrical stem, fragmentary, perhaps part of a brazier or a stand like VII A. 25 (Fig. 46).
- IX A. 3, Curved cup with offset lip, particoloured black, fragmentary (Fig. 47).
- IX A. 4, Base of cup, string-marked and black-washed (Fig. 47).
- IX A. 5, Rims of cups (2 fragments), painted white spots on black wash (Fig. 47).
- IX A. 6, Band-handle of cup, black-washed.
- IX A. 7, Loop-handle of bridged-spout jar, black-washed (Fig. 47).
- IX A. 8, Red-washed fragment painted reed-spray in white (Fig. 47).
- IX A. 9, Rim of cup, fragment, ripple-painted. L.M. I.
- IX A. 10, False-necked jar, painted seaweed-waves on body, fragmentary. L.M. II. Other fragments of this pot were found in E.
- Also conical cups and fragments of other plain and painted L.M. III. ware.

B.

- IX B. 1, Gold foil, pointed oval, folded in four (Pl. XVIII).
- IX B. 2, Silver pin, hook-head, oval section, floral pattern in relief on one face (Fig. 38). L. 15 cm.
- IX B. 3, Faience beads (11), barleycorn, now brown (Pl. XVIII, 26).
- IX B. 4, Ivory pinhead, disc. Diam. 3.2 cm.
- IX B. 5, Amethyst beads (11), globular (Pl. XVIII, 4).
- IX B. 6, Steatite gem, grey, lenticular: cuttlefish (Pl. XIX).
- IX B. 7, Steatite gem, as last, rectilinear star (Pl. XIX).
- IX B. 8, Steatite beads (6), green, flat globular.

Pottery.

- IX B. 9, Fragments of oval *larnax* and flat lid, as IX E. 8.
- IX B. 10, *Pithos*, oval, fragmentary, horizontal handle below thickened rim, painted brown trickle on red clay as XVII P. 37.

IX B. 11, *Pithos*, narrow oval, rough red clay, and fragments of at least one similar.

IX B. 12, Brazier, deep body with socket inside, fragmentary (Fig. 46).

IX B. 13, Conical cup with flat rim, as VI. 7.

IX B. 14, Foot of jar, painted ivy-band in red glaze on yellow surface (Fig. 21).
Ht. 13 cm.



FIG. 21.—BASE OF L.M. I. JAR, TOMB IX B. 14.

C.

Pottery.

IX C. 1, Braziers (2) as XXI. 1.

IX C. 2, Jug, shoulder apparently painted stripes of loops in mottled ground, clawed and rubbed by badgers. L.M. II.

IX C. 3, Miniature bowl, painted net-pattern (Pl. XXIII).

IX C. 4, Miniature jug, trough spout, painted foliate band above spiral wave-pattern (Pl. XXIII).

D.

IX D. 1, Bronze pendant, axe-blade, corroded (Fig. 38). L. 6.3 cm.

IX D. 2, Bronze mirror-disc as III. 7.

IX D. 3, Jasper gem, red, glandular : flying fish (Pl. XIX).

IX D. 4, Steatite gem, grey, lenticular : dot and rectilinear device (Pl. XIX).

IX D. 5, Stone (grey steatite or slate) beads (18), biconical (Pl. XVIII, 21).

IX D. 6, Stone (grey and white marble) bird's-nest bowl, miniature.

IX D. 7, Stone (grey steatite?) bird's-nest bowl (Pl. XX, misprinted 4).

Pottery.

IX D. 8, *Larnax* as IX E. 8, but with vertical handles.

IX D. 9, Braziers (2), deep bodies, one with roll-moulding at foot as V. 14.

IX D. 10, Base of cup like IX A. 3 (Fig. 47).

IX D. 11, Fragments of white-spotted blacked cups as IX A. 5.

IX D. 12, Cup, painted reed-sprays in dark on light brown, fragmentary (Fig. 22).
Ht. 5·8 cm.

IX D. 13, Cup with spout and handle, painted net-pattern above, wind-blown reeds below (Fig. 23). Ht. 9·5 cm.

IX D. 14, Curved cup with handle, black *bucchero*.

Also plain L.M. III. conical cups and painted sherds.



FIG. 22.—PART OF L.M. I.
CUP, TOMB IX D. 12.



FIG. 23.—L.M. I. CUP, TOMB IX D. 13.

E.

IX E. 1, Gold signet-ring, narrow solid plano-convex hoop, nearly circular bossed bezel engraved along a spiral line with 19 characters of the Minoan Linear Script A. Hoop: inside diam. 13 mm., thickness 1 mm.; bezel: 10 mm. $\times$ 8·5 mm. (Pls. XVIII, XIX and Fig. 37).

IX E. 2, Gold signet-ring, narrow concave hoop, plain pointed oval bezel (Pl. XVIII and Fig. 38).

IX E. 3, Gold beads (2 very large, 4 smaller), globular, solid. (Pl. XVIII).

IX E. 4, Gold bead, blunt oval, hollow, embossed with encircling signet-ring (Pl. XVIII and Fig. 39).

IX E. 5, Bronze knife-blade as III. 4, broken.

IX E. 6, Faience beads (10), small discs, white (Pl. XVIII, 23).

IX E. 7, Carnelian beads (9), globular (Pl. XVIII, 6).

Pottery.

IX E. 8, *Larnax* and lid: oval box with vertical sides thickened and bevelled outwards at lip, a vertical handle at each end, a horizontal handle in middle of each long side; flat lid made in separate halves, each with two loop handles set in opposite directions, bevelled edges. Box pale brown, lid dark brown clay, unpainted (Fig. 20). L. 86 cm.

IX E. 9, Jug with cutaway neck as XVII P. 32, spout broken.

IX E. 10, Curved cup with handle, red-washed, fragmentary. M.M. III.

IX E. 11, Fragments of black-washed ware: a cup-base, two rims and three other pieces, of which two are white-spotted, as IX A. 5 (Fig. 47).

Also fragments of plain and painted L.M. ware.

X (Fig. 24).

A short cutting like the *diadromos* of a chamber-tomb, but stopping at a projecting rock, beneath which stood a *larnax*. This is one of the few painted examples from the cemetery: the sides have single sunk



FIG. 24.—TOMB X.

panels with incised borders, and one long panel contains wavy stripes with hatched filling, done in red glaze on yellow ground. It was empty.

XI (Fig. 25).

An irregular shaft like X, but larger and with a deep niche in the back wall. It contained two *larnakes*, one with broken lid in the inner niche, the other standing against the left-hand wall. Both were empty except for some scraps of bone.

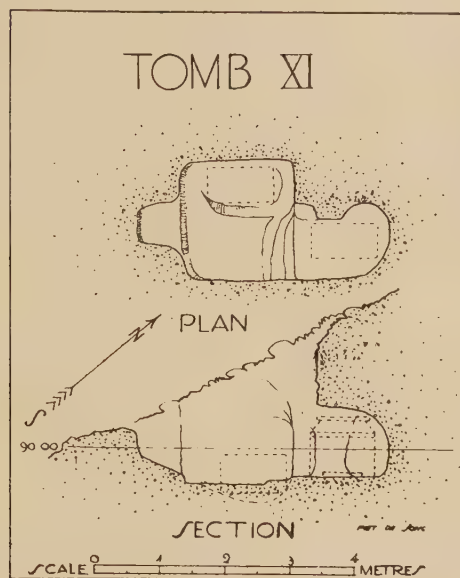


FIG. 25.



FIG. 26.—PAINTED *LARNAX* AND LID, TOMB XI. 1.

- XI. 1, *Larnax* with lid. An oblong chest with remains of painting on one end (wavy stripes) and one long side (stylised argonauts), the other faces decayed. Dark red clay with yellow surface, red-black glaze. The lid has a different fabric, of pale yellow clay with brown-black glaze. It is pyramidal with ridge projecting at ends, painted decoration of wavy stripes and bars filled solid. Broken and perished (Fig. 26).
L. 1.34 m.

XI. 2, *Larnax*, unpainted, single sunk panels.

XII.

Small single chamber-tomb, as XIII, collapsed.

- XII. 1, Stone (grey steatite?) bird's-nest bowl, six petals in relief (Pl. XX).

Pottery.

- XII. 2, Brazier, as XXI. 1.

- XII. 3, Beaked jug, unpainted light brown clay.

XIII (Fig. 27).

Small chamber-tomb with sharp front corners; a mass of hard rock projects from the curved back wall. The roof had collapsed. In the *diadromos* is a shaft-grave containing a *larnax*, which contained nothing but the fragments of its lid. In the chamber was an exceptionally well preserved group of L.M. IIIa pots.

Pottery.

- XIII. 1, *Larnax*, single sunk panels, and lid as XI. 1, but with a vertical loop handle at each end of each long side and a large round hole between each pair. From the shaft-grave.
- XIII. 2, False-necked jar, tall body, painted notched band on shoulder, hatched tongues and triangles in handle-ring, fine red-black glaze on bright brown clay (Fig. 28).
- XIII. 3, False-necked jar, globular body, painted chevron-groups in handle-ring, brown-black glaze on smooth pale yellow clay.
- XIII. 4, Side-spouted jar, painted double wavy line on shoulder, brown glaze on brown clay.
- XIII. 5, Squat alabastron, painted solid waves on body, concentric rings under base, fabric as 2.
- XIII. 6, Cylindrical jar with lid and two knob-handles, painted thin bands.

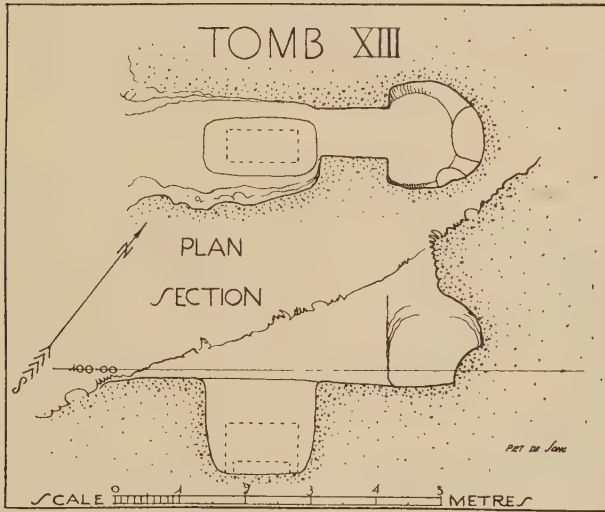


FIG. 27.



FIG. 28.—TOP OF FALSE-NECKED JAR, TOMB XIII. 2. ($\frac{1}{3}$ scale).

XIV.

Small chamber-tomb as XIII but unsymmetrical. It contained nothing but an unpainted potsherd and four decayed oval beads of blue faience.

XV (Fig. 29).

This and the next were the best examples of the small (apparently L.M.) chamber-tombs cut in the comparatively slight slopes of the terrace-

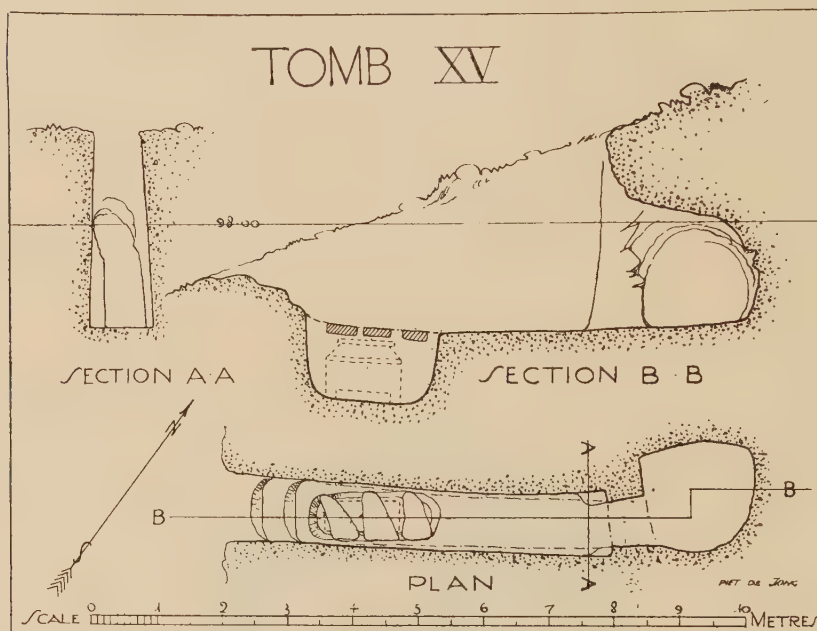


FIG. 29.

floors. They have long *diadromoi* with walls converging towards the top and floors descending steeply (perhaps by steps) at the entrance. Their doorways were walled up with two thicknesses of small rough stones (Fig. 30), but since the tops of both doorways had collapsed with the roofs of the tombs, it was not possible to make certain that the walling was intact. A few scraps of bone were found with remains of funeral furniture in the chamber of XV. Just inside the *diadromos* was a shaft-grave, containing a complete but empty *larnax* with its lid in place, and roofed with three flat stones.

- XV. 1, Bronze mirror-disc as III. 7, and a piece of a pin or wire.
 XV. 2, Remains of a natural bivalve shell, appearing as a layer of decayed mother-of-pearl.
 XV. 3, Steatite whorl-beads (4), one with incised circles as XX. 5, two concave (Pl. XVIII, 8, 12).



FIG. 30.—DOORWAYS OF TOMBS XV (closed) AND XVI (open).

Pottery.

- XV. 4, *Larnax*, single incised panels, and lid as XI. 1, from the shaft-grave.
 XV. 5, False-necked jar, fragments, painted dot-flowers in handle-ring, and single fragments of *pithos*-rim and goblet-stem.

XVI (Fig. 31).

As last, but the long *diadromos* is cut through the chamber of an earlier tomb which had probably collapsed. In the middle of the floor of this tomb (and of the *diadromos*) is a small cavity in which were pieces of human leg-bones; on its left-hand side (now a large niche in the *diadromos* wall), a stone bowl and part of a plain conical cup; on the

right, a brazier. The doorway was walled up, as XV, and the tomb was full of fallen earth, but beneath this was an apparently intact *larnax* (Fig. 30), which contained nothing but a few scraps of bone. Another plain conical cup was inside the tomb-chamber.

XVI. 1, Stone (brown, black-spotted) bird's-nest bowl, as IX D. 7.

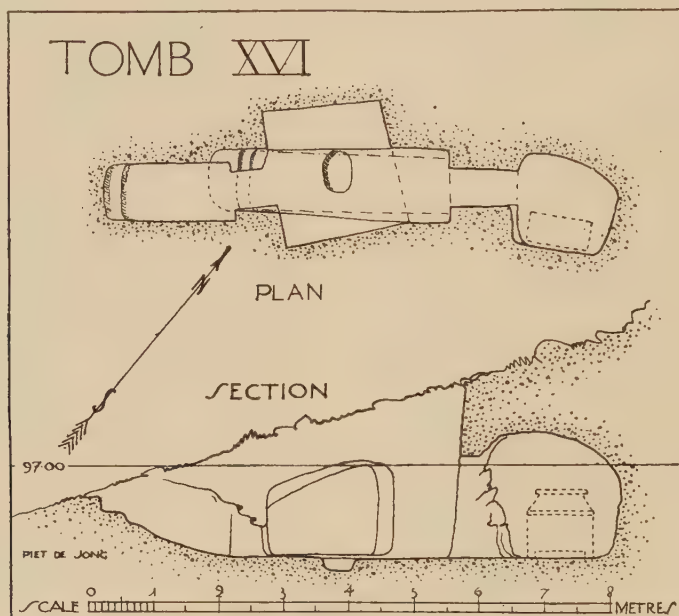


FIG. 31.

Pottery.

XVI. 2, *Larnax* and lid, painted wavy stripes (Fig. 30). Ht. of chest 67 cm.

XVI. 3, Brazier as V. 14, but with bevelled foot.

XVI. 4, Conical cups (2), as II. 3.

XVII (Fig. 32).

Probably a double chamber-tomb like VII, and similarly collapsed in front, but the back-buttress could not be identified, and the chambers are now separated by a central pillar which may be fallen rock. The top filling was an exceedingly hard mass. In the front filling of fallen earth were many sherds of coarse pottery, among them fragments of oval

larnakes like IX E. 8, and handles and bases of M.M. III. pinched-mouth jars. In the left-hand wall of A is a niche 30 cm. above the floor, and on the right-hand side of B is a pit 1 m. deep. There were three L.M. *larnakes* in B, packed one behind another, and one in A, cut off evenly

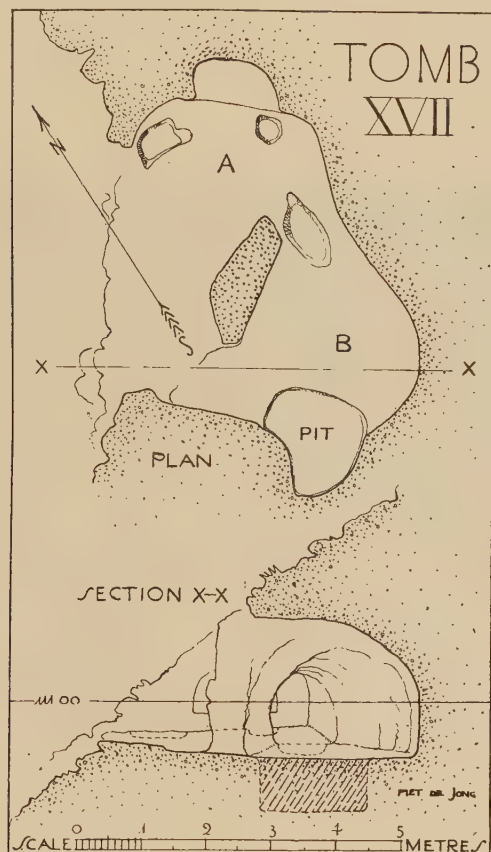


FIG. 32.

half-way up its sides, evidently at the moment when the accumulation of earth had reached this level (Fig. 33). This *larnax* stood on the floor of the tomb and contained a skull, some other bones, and large pieces of its broken sides. Those in B rested on a deposit of grave-earth and mud about 35 cm. deep. The front *larnax* was empty; each of the others contained a skull and bones nearly in their original positions, but not intact. When

the floor of this chamber had been cleared, part of it was seen to be paved with large pieces of *pithoi* (Fig. 48), which had doubtless served for burial-receptacles in the M.M. period. Beneath these was the pit (Fig. 34), filled with grave-refuse, earth mixed with skulls, bones, beads and M.M. II*b* pottery. In the middle of this filling was a small lump of iron.

A.

XVII A. 1, Bronze knife as III. 4.

XVII A. 2, Bronze spiral hair-rings (2).



FIG. 33.—TOMB XVII, CLEARED OF FALLEN EARTH.

XVII A. 3, Amethyst bead, globular (Pl. XVIII, 4).

XVII A. 4, Steatite gem, grey, lenticular: deer and tree (Pl. XIX).

XVII A. 5, Steatite half-disc pierced 2 holes (Pl. XVIII, 16).

XVII A. 6, Steatite or slate whorl-beads (2) (Pl. XVIII, 7).

Pottery.

XVII A. 7, *Larnax*, single incised panels, upper half cut off (Fig. 33, left).

XVII A. 8, Round-mouthed jug, black-washed, as XVII P. 29.

XVII A. 9, Cup-base, black-washed, as IX A. 4.

XVII A. 10, Jug, miniature, painted rosette-filled spiral coils (Pl. XXIII).

XVII A. 11, Open bowl, painted hanging spirals with hatched angles.

Also 3 plain conical cups and sherds of other L.M. III. plain and painted ware.

B.

XVII B. 1, Bronze wire ring.

XVII B. 2, Bronze tweezers as V. 4, decayed.

XVII B. 3, Ivory fragment of comb.

XVII B. 4, Carnelian bead, globular.

XVII B. 5, Crystal lid, flanged disc, fragmentary.

XVII B. 6, Jasper gem, red, glandular, broken: goat. M.M. III. The stone is bored obliquely along the line of the goat's body.

XVII B. 7, Steatite gem, grey, lenticular: hatched petals and volutes (Pl. XIX).

XVII B. 8, Steatite gem, grey, glandular: rectilinear device (Pl. XIX).

XVII B. 9, Steatite whorl-beads (2) (Pl. XVIII, 7).

Pottery.

XVII B. 10, *Larnax*, single incised panels (Fig. 33, front). Ht. 71 cm.

XVII B. 11, *Larnax* as last, but with ridge below the projecting lip (Fig. 33, back).

XVII B. 12, *Larnax*, sunk double panels on long sides, single at ends.

XVII B. 13, Jug, miniature, painted wavy line and dots (Pl. XXIII).

XVII B. 14, Side-spouted jar, painted curve-hatched figures on shoulder.

XVII B. 15, Jar as last, painted wavy line on shoulder.

Pit.

XVII P. 1, Bronze spiral hair-ring, bead, and fragments of pins or wire.

XVII P. 2, Iron cube, corroded (Pl. XXIII).

XVII P. 3, Faience seal-pendant, white, obliterated device (Pl. XVIII, 3, and Fig. 39).

XVII P. 4, Faience bead, cylindrical, white ends, brown body with zigzag fluting (Pl. XVIII, 2, and Fig. 39).

XVII P. 5, Faience beads, blue: globular (2), collared and ribbed globular (1), oval (1), cylindrical (1).

XVII P. 6, Faience beads, brown: semi-globular fluted (53) (Pl. XVIII, 5 and Fig. 39), globular (2), double tubular (1), reeded cylindrical (1), pointed oval (1).

XVII P. 7, Faience bead, white, globular.

XVII P. 8, Amethyst beads, globular (3) (Pl. XVIII, 4).

XVII P. 9, Crystal beads, smoky, globular (50) (Pl. XVIII, 1).

XVII P. 10, Crystal beads, flat globular (2).

XVII P. 11, Steatite gem, black, lenticular : goat's head (Pl. XIX).

XVII P. 12, Steatite gem, grey, lenticular : hatched petals and volutes on one side, quadruped or demon on the other (Pl. XIX).

XVII P. 13, Steatite gem, grey, lenticular : small ringed pits (Pl. XIX).



FIG. 34.—PIT IN TOMB XVII.

XVII P. 14, Steatite seal-pendant, grey, device as last (Pl. XVIII, 19, and Fig. 40).

XVII P. 15, Steatite jug, grey, handle missing (Pl. XX).

Pottery.

The fabric is generally coarse, light brown clay, dull black or dark red glaze.

XVII P. 16, Flat plate with heavy roll rim, fragmentary.

XVII P. 17, Lid, slightly domed, hollow vertical rim.

XVII P. 18, Dish with flat base and sloping sides. Also fragments of 5 or 6 similar dishes.

- XVII P. 19, Dish with flat base, curved sides and flat rim, spiral wheel-marks inside, half-painted black (Pl. XXIII). Another with string-marked whorl-base.
- XVII P. 20, Dishes (3) as last but rougher, unpainted or completely painted black or red, and fragments of others (Pl. XXIII).
- XVII P. 21, Dish with flat loop handle on rim, fragment.
- XVII P. 22, Curved bowl, fragment of base half-painted each side, as IX D. 10.
- XVII P. 23, Cups (2), very low conical, unpainted or red-washed (Pl. XXIII).
- XVII P. 24, Cup, tall conical with vertical flat loop handle (Pl. XXIII). Also fragments of 2 similar cups, one with horizontal round loop handle, the other perhaps handleless.
- XVII P. 25, Cup, tall conical with thin wheel-marked walls and string-marked base, dipped black-glaze band at lip (Pl. XXIII).
- XVII P. 26, Cup with double-curved body, daubed red-glaze band at lip, splashed inside (Pl. XXIII). Also fragments of similar daubed and splashed cups, conical and curved.
- XVII P. 27, Tripod pot, miniature, with spout and two lugs, red-washed (Pl. XXIII).
- XVII P. 28, Jug, round-mouthed, unpainted, handle missing (Pl. XXIII), and another red-washed.
- XVII P. 29, Jug similar, but finer fabric, with round loop handle, striped white on black (Pl. XXIII).
- XVII P. 30, Jug as last but with string-marked base and splashed white on black, handle missing (Pl. XXIII).
- XVII P. 31, Jug as 29 but unpainted, and fragments of 2 others.
- XVII P. 32, Jug with cutaway neck, trough spout and round loop handle, body black-washed (Pl. XXIII).
- XVII P. 33, Jug with trefoil lip and round loop handle, shoulder scored horizontally, straight string-marks on base, red-washed (Pl. XXIII).
- XVII P. 34, Bridged-spout jar, fragments of top and base, squat shape, thin fabric with sharp bevelled lip, painted white stripes on black (now shewing as black on bare clay), and perhaps clusters of red dots on the broad white stripes (Pl. XXIII).

Large sherds from top of pit.

- XVII P. 35, *Pithos*, fragment with heavy rim and vertical handle, body painted two horizontal bands in black (Fig. 48).
- XVII P. 36, Similar fragment, with slighter rim, body painted one broad stripe (Fig. 48).
- XVII P. 37, Similar fragment, with slight turned-out rim, body painted group of close trickle-stripes (Fig. 48).
- XVII P. 38, *Pithos*, fragment from bottom of side with vertical handle, painted trickle-stripes (Fig. 48).

Also many similar fragments, painted and unpainted.

XVII P. 39, Basins, fragments (2) with flat rim, one with horizontal handle in space reserved in black paint.

XVIII.

Small collapsed chamber-tomb as XXI, with unsymmetrical chamber. It contained the only set of weapons found in the cemetery. The sword had been deliberately bent to make it useless.

XVIII. 1, Bronze sword, flanged hilt and cross-guard, tang for pommel, blade bent nearly double and broken. L. 47.5 cm. As *P.T.* i., Fig. 109, 42 *a*.

XVIII. 2, Bronze dagger, flanged blunt shoulder, hilt and horned pommel. L. 27.5 cm. As *loc. cit.*, 95 *e*.

Also several loose rivets from the hilts.



FIG. 35.—L M. III POTTERY, TOMB XIX. 3.

XVIII. 3, Bronze spearhead, tapered from point to socket. L. 20 cm. As *P.T.* i., Fig. 113, 75 *e*.

XVIII. 4, Bronze knives (2), oval, broken and decayed.

XVIII. 5, Bronze mirror-disc as III. 7.

XVIII. 6, Stone (grey) bird's-nest bowl with lid (white-spotted) (Pl. XX).

Also some fragments of unpainted pottery.

XIX.

As XVIII, but cut in a steeper slope.

XIX. 1, Bronze mirror-disc as III. 7.

XIX. 2, Bronze knives (2), long, as III. 4, one with remains of ivory grip-scales.

Pottery.

XIX. 3, Double bowl with central loop-handle, painted triple wavy stripes (Fig. 35). L. 32 cm.

XX.

Shaft-grave containing a single *larnax* with lid, broken down by six large flat stones, probably the covering-slabs as in XV. A whorl-bead was found inside the *larnax*, the other material with some pieces of bones outside.

XX. 1, Bronze knife, long, as III. 4.

XX. 2, Bronze tweezers as V. 4, fragmentary.

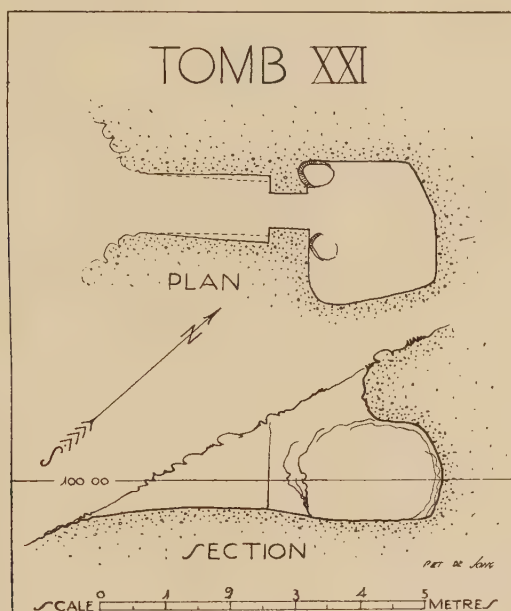


FIG. 36.

XX. 3, Bronze wire or broken pin-shaft.

XX. 4, Natural shells (3), and galena (3 small pieces) as VII B. 11.

XX. 5, Steatite whorl-bead, engraved small ringed pits (Fig. 40). Diam. 2.3 cm.

Pottery.

XX. 6, *Larnax*, single sunk panels, with lid as XI. 1, fragmentary.

XX. 7, Brazier or flat-lipped cup with hollow conical foot, rough red ware (Pl. XXIII).

XXI (Fig. 36).

Small collapsed chamber-tomb with short *diadromos* (in a steep slope). In the chamber-floor on each side of the doorway is a small shallow cavity.

Pottery.

XXI. 1, Braziers (2) with very deep body, one containing charcoal-dust (Pl. XXII).

XXI. 2, Brazier, as I. 2 but deeper.

XXI. 3, Tall beaked jug, painted linear ornament on throat and shoulder.

Also fragments of other L.M. III ware.

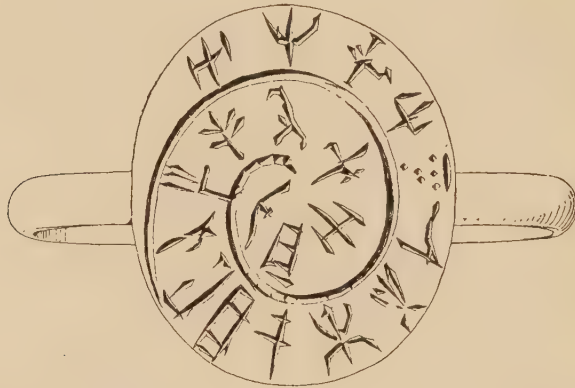


FIG. 37.—INSCRIBED GOLD RING, TOMB IX E, 1. (Scale 5:1.)

XXII.

Apparently as XXI, but with chamber entirely collapsed and *diadromos* fallen away. A *larnax* standing on the floor had its top just below the surface of the hill.

XXII. 1, Crystal bead, lenticular.

XXII. 2, Steatite whorl-beads (2) (Pl. XVIII, 7).

Pottery.

XXII. 3, *Larnax*, single incised panels as XVII B. 10.

NOTES ON THE MATERIAL.

The inscribed gold ring (IX E. 1, Pls. XVIII, XIX and Fig. 37) has already been published by Sir Arthur Evans,¹ who assigns the script (Linear

¹ *The Times*, June 8, 1927; *P.M.* ii. p. 557.

A) to M.M. III., and thinks that its meaning may be talismanic because of the Double Axe sign which begins the first and last groups (the legend being written from the edge towards the centre). The spiral sequence is well known from the Phaistos Disc, which is generally regarded as a foreign document, and the same sort of arrangement, without the guiding line, occurs with Minoan ink-written inscriptions inside two pottery cups of this date.¹ It is also possible, since the ring is not a finger-ring but a signet, that the legend is a personal name or title, like those on

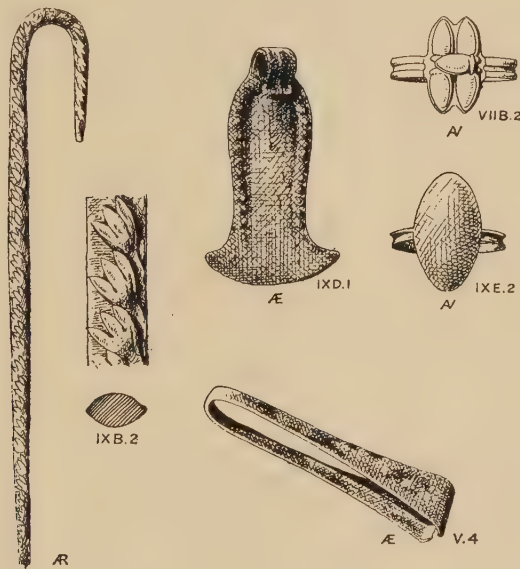


FIG. 38.—HAIRPIN, TWEEZERS, PENDANT, RINGS.

contemporary Egyptian rings and scarabs and on the earliest inscribed Greek rings. The pale gold ring VII B. 2 (Pl. XVIII and Fig. 38) is large enough to fit a small finger and its device is certainly not a seal. The five unrecognised objects clustered on its flat bezel look like little jars² or chrysalids,³ both of which had an amuletic value and were worn as pendants. The embossed gold bead IX E. 4 (Pl. XVIII and Fig. 39) found with the inscribed ring is a new illustration of the genesis of the Minoan signet and finger-rings with long oval bezels set at right angles to their hoops, which Evans has recently explained.⁴ They were originally

¹ *P.M.* i. p. 613.

² Seager, *Mochlos*, Fig. 30 (M.M. III.).

³ Evans in *J.H.S.* XLV. (1925), p. 59.

⁴ *Ibid.*, p. 47.

bead-seals, engraved circular or oval plates attached to tubular beads for wearing on a string. An actual example in ivory comes from an E.M. tholos at Kumasa. Later developments lengthened the bezel and shortened the tube to a hoop, still too small for the finger and evidently meant for suspension.

The gold earrings (VII A. 1, VII B. 1, Pl. XVIII) are the finest specimens of a not uncommon L.M. type originating in a simple swelling hoop like III. 3, with a cluster of globules attached. The cluster has become here a granulated cone, and the granulation creeps over and under the smooth limbs of the hoop like frontal hair around a bull's horns. This fortuitous likeness is exploited in some examples from Cyprus¹ by the addition of spiral wires to represent the ears. The steatite bull's head pendant (VII A. 17, Pl. XVIII, 10 and Fig. 40) resembles one in amethyst found at Mochlos in an L.M. I. grave.² There is a suggestion of bulls' heads about the two triangular pendants VII A. 18, 19 (Pl. XVIII, 9, 11 and Fig. 40). These have V-perforation.

Beads and pendants³ were comparatively plentiful, and some fortunately occurred in a datable context in the M.M. IIb pit in Tomb XVII (Pl. XVIII, 1-5). The large amethyst globes (4) are a characteristic Egyptian form of the Twelfth Dynasty; eleven came from IX B, and six similar gold beads (Pl. XVIII) were found with the M.M. III. ring in IX E. But most of the beads from the M.M. II. pit are faience, blue, brown and white. Singular forms are the large collared cylinder with zigzag fluting and the half-melons (Pl. XVIII, 2, 5 and Fig. 39). The latter were probably a prototype of the common Mycenaean cone-beads usually called spindle-whorls (Pl. XVIII, 7), which are sometimes hollow-sided and suggest flower-calices (Pl. XVIII, 8, 12). Another unique but undated shape is the lapis-lazuli cruciform spacing-bead III. 15 (Pl. XVIII, 20 and Fig. 39). The circular prism VII B. 4 (Pl. XIX and Fig. 39) is a late development of a common E.M. seal-stone; its engraved designs place it in M.M. III.

Three of the engraved gems (Pl. XIX) are also dated by their position in the M.M. II. deposit, XVII P. 11, 12, 13. The goat's head is a precocious naturalistic work, and the formal volute-design is closely related to a more important example found outside the pit, XVII B. 7, which bears a voluted

¹ *B.M. Cat. Jewellery*, 538.

² *Mochlos*, Pl. X.

³ For the forms generally see H. C. Beck, 'Classification and Nomenclature of Beads and Pendants,' in *Archaeologia*, LXXVII (1928).

canopy borrowed from Egyptian scarabs.¹ Two other stones, XVII A. 4 and IX D. 3, are freely naturalistic and belong to M.M. III.—L.M. I. The former shows an odd convention of perspective, by which the deer's body is broken to display the tree. Later formalism is represented by only four examples, III. 13, IV. 12, VII B. 5 and 6, the last two a pair with remarkable subjects of the latest date, L.M. III*b*. The rest of the gems, that is the greater number, belong to an early stylised class which

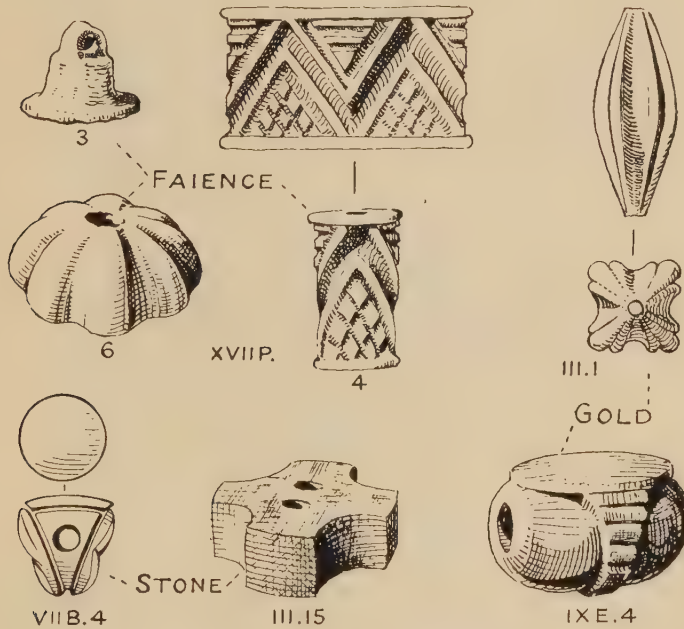


FIG. 39.—BEADS AND PENDANTS.

is dated here by its finest example from the M.M. III*a* tomb, VI. 1. Some like this bear formal cuttle-fish, others have rectilinear devices which were doubtless reminiscent of more intelligible designs. Evans has shewn that some were derived from masks and buildings.² Their M.M. III.—L.M. I. date is confirmed by their occurrence in jar-burials of these periods at Sphoungaras.³ The figures on the marble cylinder VII A. 14 are nearly obliterated, but a man wrestling with an erect animal and a seated bull can be made out, and the seal is said to belong to a

¹ For the significance of this motive see *P.M.* ii. pp. 200, 480, 557.

² *P.M.* i. p. 672.

³ E. H. Hall, *Sphoungaras*, p. 69.

Hittite or North Syrian class not later than 1400 B.C. The design is reproduced nearly twice in this impression.

Three bossed crystal discs (III. 14, VII A. 13, Fig. 40) have been identified as short-focus magnifying lenses by H. C. Beck,¹ who finds from the measurements that the one illustrated here would have a power of ten diameters. Such discs were painted on their flat surfaces and used for inlay,² and their magnifying effects have already been noticed by Evans, particularly in regard to the eye of the steatite bull's head from

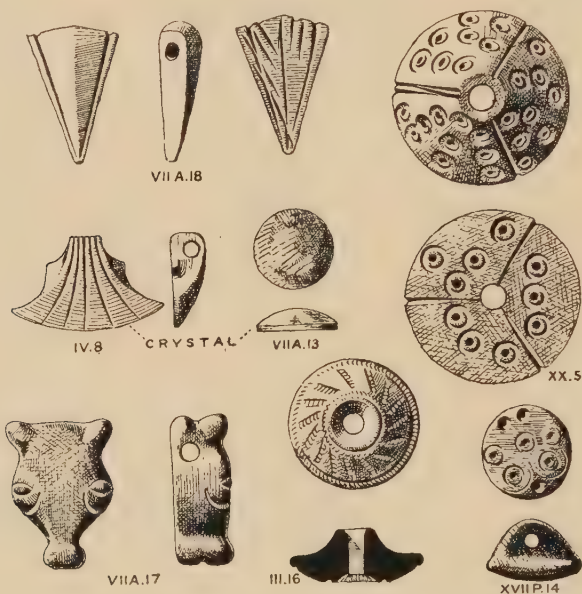


FIG. 40.—STEATITE AND CRYSTAL BEADS, PENDANTS AND LENS.

the Little Palace.³ It is not possible to know whether these examples were made for decorative purposes or for practical use as optical instruments or burning-glasses, but it is certain that all their qualities were appreciated. The pair from Tomb III may have had some connection with the small bronze balance and lead weights from the same tomb (III. 8, 9, Fig. 6), as part of the apparatus of a craftsman. These were evidently not symbolical like the butterfly-scales from the Third Shaft-

¹ *Antiquaries' Journal*, viii (1928), p. 329.

² *P.M.* i. p. 471.

³ *Tomb of the Double Axes, etc.*, p. 82.

grave at Mycenae.¹ Bronze scale-pans and haematite weights were found in Mycenaean graves at Enkomi² and Ialysos.³

Bronze implements and ornaments from the Mavro Spelio tombs were generally commonplace and ill-preserved. An exceptional pair of tweezers is V. 4 (Fig. 38); it has a fine lustrous patina and has kept its original spring, probably by some peculiarity of the alloy, for other bronzes in the same tomb were badly decayed. The axe-blade pendant (IX D. 1, Fig. 38) is unique. A hook-head pin in bronze (VII A. 7) was broken and corroded, but another in silver shews on one side a handsome design of crocus-flowers in high relief, done in fine M.M. III. style (IX B. 2, Fig. 38). The heavy oval section of this pin and its embossed ornament indicate that it was not used for clothes, a rudimentary *fibula*, as Blinkenberg⁴

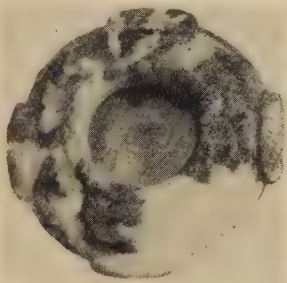


FIG. 41.—TOP OF MARBLE BOWL, TOMB III. 20.

has claimed, but was indeed a hairpin, as Evans described the twisted gold example from the Royal Tomb at Isopata.⁵

Tomb III produced nine of the twenty-four stone vases (Pl. XX) found in the cemetery, and those of the best quality and variety. The commonest form is the plain bird's-nest bowl, an M.M. I. type that persisted without much change through the L.M. period. Seager noted that the high shoulder (IX D. 7) is a mark of late date.⁶ Next in quantity are flower-bowls, normally with six petals (XII. 1), once with two (II. 1). These are L.M. The marble bowl with four shoulder-lugs (III. 20, Pl. XX and Fig. 41) is an earlier type, as is probably the bowl with spiral reeding

¹ For these and other references see Evans in *J.H.S.*, *loc. cit.*

² *B.M. Excav. in Cyprus*, Fig. 32.

³ Furtwängler and Loeschcke, *Myk. Vasen*, Pl. B, 21.

⁴ *Fibules Grecques et Orientales*, p. 40.

⁵ *P.T.* ii. p. 151.

⁶ *Pseira*, p. 36.

(III. 19), but such durable vessels may be much older than their interments. Thus the small steatite jug XVII P. 15 is an E.M. form ¹ and comes from the M.M. II. pit. The finest pieces are the veined grey marble libation-jar with pierced base and separate neck (III. 18, Fig. 42),



FIG. 42.—MARBLE LIBATION JAR, Tomb III. 18

belonging to L.M. Ia,² and the green serpentine bowl with flat rolled lip and base and a hole for a separate spout (III. 17), which may be earlier.

The terracotta idol VII B. 9 (Pl. XXI) is a novelty, and a valuable religious document if the persons represented are divine, putting back into the Minoan age what Farnell has recently called 'an important

¹ *Mochlos*, Fig. 22, VI. 4.

² *P.M.* ii. p. 556.

phenomenon in the history of religion, a Cretan contribution to the development in the Mediterranean of the worship of a Holy Infant.'¹ The cylindrical base is characteristic of a large class of female figures, another of which comes from this cemetery (III. 25, Fig. 43); it does not seem to represent a woman's skirt, but may well be a survival of a baetylic image. Three similar figures were found on the altar-ledge of



FIG. 43.—TERRACOTTA IDOL, TOMB III. 25.

the Shrine of the Double Axes in the Palace, one with uplifted hands and a dove on her head manifestly representing the goddess.²

The L.M. *larnakes* are generally rough, with plain sunk or incised panels; only three of the complete ones were painted, but one has an unique design (XI. 1, Fig. 26). The M.M. type from Tomb IX (Fig. 20) is also unique at Knossos, and rare in Crete. Oval burial-chests with flat lids were found at Pachyammos, where Seager dated them from E.M. III. to M.M. II.³ The form belongs to Egypt⁴ or Mesopotamia.⁵

¹ *Essays in Aegean Archaeology presented to Sir Arthur Evans*, p. 24.

² *P.M.* ii. p. 340; for the Mavro Spelio Madonna, *ibid.*, p. 557, Suppl. Pl. XXI.

³ Seager, *Pachyammos*, p. 16.

⁴ *P.M.* i. pp. 126, 586.

⁵ *Antiquaries' Journal*, viii (1928), Pl. III (Woolley, *Excavations at Ur*); H. R. Hall, *Civil. Greece in Bronze Age*, p. 191.

The commonest articles of tomb-furniture are the pottery braziers and conical cups. The former may have served the practical purpose of fumigation, but the latter (Pl. XXIII) were specially used elsewhere ¹ to



FIG. 44.—M.M. PAINTED POTTERY BRAZIER, TOMB VII A. 23.

hold food-offerings, and this was doubtless their function in the grave. A certain chronological sequence can be established in their shapes; those from the M.M. III. tomb (VI. 6, 7) have tall steep sides and some-



FIG. 45.—POTTERY BRAZIER WITH UNFIXED POLYCHROME DECORATION, TOMB V. 13.
($\frac{1}{2}$ scale.)

times flat rims, while the L.M. examples have lower walls and narrower bases (II. 3, V. 23). The braziers often retain lumps or dust of the charcoal which was left burning in them (XXI. 1), and one from Isopata also contained resin.² I have illustrated a type-series (Pl. XXII), but it is not likely that the variations of form shewn there, in depth of body,

¹ *P.M.* ii. pp. 134, 548.

² *Tomb of the Double Axes, etc.*, p. 13.



FIG. 46.—POTTERY BRAZIERS OR RITUAL VESSELS.



FIG. 47.—FAIENCE FRAGMENT AND M.M. POTSHERDS.

width of rim, direction of handle and moulded ornament, have much chronological value. One piece, however (VII A. 23, Pl. XXII and Fig. 44), bears painted decoration that sets it in the later M.M. period, and also has an odd uptilted handle. Several tombs produced small fragments of braziers that had been brightly painted in unfixed colours, red, white and blue, like some from Hagia Triada illustrated by Evans in connection with his finds of polychrome sepulchral pottery at Isopata.¹ Such fugitive

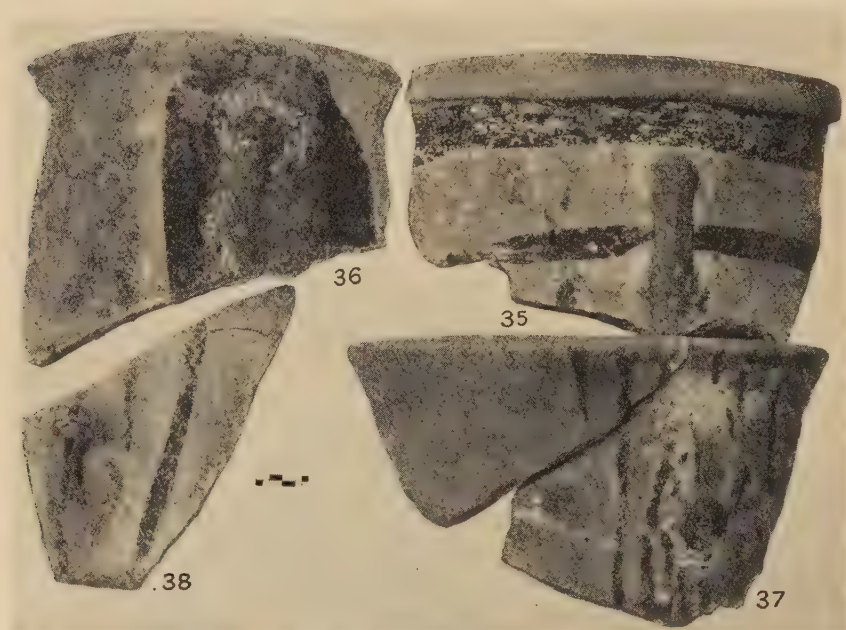


FIG. 48.—FRAGMENTS OF M.M. II BURIAL JARS, TOMB XVII, PIT.

pigments are very poorly preserved, but the design on the largest fragments could be made out as an arcaded petal-pattern (V. 13, Fig. 45). The Hagia Triada examples belong to L.M. I. Another kind of brazier (IX B. 12, Fig. 46) has a central socket and is sometimes described as a candlestick.² Two flat dishes with pierced centres and hollow cylindrical stems (VII A. 25, IX A. 2, Fig. 46) doubtless had some ritual use, perhaps as tables of offerings.

The rest of the pottery is unimportant, except in so far as it helps

¹ *Ibid.*, p. 29.

² *P.M.* i. p. 578.

to establish the early origin of the tombs and their continuous use from M.M. IIb to L.M. IIIb, which is also demonstrated by the seal-stones. The smallest scraps of M.M. ware have been recorded (Fig. 47), and most of the examples of intermediate wares which have been put together are illustrated above. The faience fragments V. 7 (Figs. 9 and 47) may be M.M. III. or L.M. I., for the spiral decoration is in finer style than

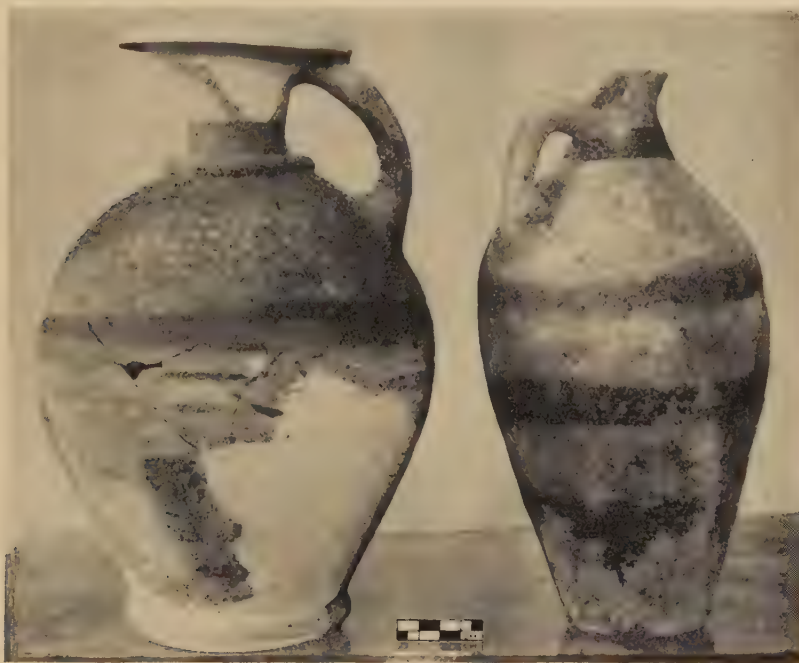


FIG. 49.—M.M. IIIa POTTERY, TOMB VI. 3, 4.

that on the bowls of similar fabric from Enkomi. The pottery from the pit in Tomb XVII (Pl. XXIII) is a homogeneous group of precisely the same moment as the deposit in the Loom-weight Basement of the Palace¹ (M.M. IIb), and the large *pithos*-fragments that formed its cover have the profiles and decoration of the same period (Fig. 48). Similar pottery, large and small, was found in Tomb IX, and indeterminate M.M. II. or III. sherds occurred in several tombs. Another homogeneous deposit was in Tomb VI, which was apparently closed by a landslip in the middle

¹ *P.M.* i. p. 248.

of M.M. III. Its two typical vases illustrated in Fig. 49 belong to M.M. IIIa.¹ The piece of iron from the middle of the M.M. II. pit is and probably was a curiosity. It may have had magnetic powers, but does not imply the practical use of the metal at this date. The earliest Aegean artifacts of iron are finger-rings from L.M. I. beehive-tombs at Vaphio and Kakovatos, some two hundred years later.

E. J. FORSDYKE.

¹ *P.M.* ii. p. 555.

A NEW CRETAN INSCRIPTION.

AT the edge of the excavations in the Lower Town at Knossos was found a fragment of a steatite libation table; it was considerably above the original ground level, and had probably been washed down from the Palace. Its sides must have measured about 10.4 cm., and the diameter of the hollow about 7.4; but as it is cut slightly irregularly it is impossible to give exact measurements. In shape it resembles those figured in *B.S.A.* ix. p. 41, Fig. 20 *e*, from Knossos, and vi. Plate XI, 2 from the Dictaeon Cave, except that underneath it slopes away to the base rather less sharply than those examples.

On its side were scratched two signs. The first is No. 45 in Sir Arthur Evans' *Scripta Minoa*,¹ which is said to be the representation of a gate, and to mean 'Keeper' or 'Guardian.' The second is similar to No. 52, except that it has five dashes inside the circle; Sir Arthur Evans does not mention the sign with more than four, but he points out its probable connection with an Egyptian sign of a circle with five dots meaning 'corn on the threshing floor.' Further the dashes in the sign on this fragment are arranged in the same way as those in the Egyptian sign. Thus the inscription appears to mean 'Guardian of the threshed corn.'

O. DAVIES.

¹ P. 232, Fig. 102.

ANNUAL MEETING OF SUBSCRIBERS.

THE Annual Meeting of Subscribers to the School was held in the Rooms of the Society of Antiquaries, Burlington House, on Tuesday, November 1st, 1927, Dr. J. W. MACKAIL in the Chair.

The Chairman of the Managing Committee, Mr. GEORGE A. MACMILLAN, presented on their behalf the following Report for the Session 1926-1927 :—

Director.—The Director reached Athens in mid-November, after spending about nine weeks in England. He attended the Annual Meeting of the School, at which the Prime Minister presided, on November 2nd, and gave an account of the third season's excavations at Sparta; he lectured on the same subject at Oxford, Cambridge and Liverpool. In addition to completing his annual summaries of recent archaeological discoveries for the *Hellenic Journal* and the *Year's Work*, he assisted in revising the final proofs of the *Annual*, Vol. XXVI. His original work, during the winter in Athens, was devoted mostly to epigraphy, and included the preparation for the *Annual* of an account of the inscriptions found at Sparta in 1926, and preliminary studies of some of those found by Sir Wm. Gell in Asia Minor in 1812, and recorded in his Diary now in the possession of the School. His other contribution to the *Annual*, on the excavation of the Theatre at Sparta, was written during June, after he returned from the fourth campaign there. This work was encroached on, more than usually, by administrative duties, especially in connection with the property of the School, to which reference is made below. In December he visited the American School's excavations at Nemea and Corinth, and in February spent two days at Sparta arranging for the lease of a new excavation-house, and verifying certain details for his inscription-article. He left again for Sparta—after lecturing at an Open Meeting of the School—at the end of March, and was in charge throughout, returning to Athens on May 26th, breaking his journey at Nauplia in order to see the recent German excavations at Tiryns, and the tombs being dug by Dr. Blegen, of the American School, near the Argive Heraion.

For the next two months he was constantly occupied with the completion of his work for the *Annual*, and with accounts and other administrative duties; but found time also to examine eighteen candidates in English for the Ministry of National Economy, to collect, as far as possible, accounts of recent excavations for his articles referred to above, to arrange and catalogue (with the help of Miss Chapman) the numerous accessions to the School's collection of lantern-slides, and to attend to routine duties in the Library during Mr. Heurtley's absence in Macedonia. Having arranged for certain necessary repairs and renewals to the School's property, he left Athens on July 22nd.

Assistant Director.—Mr. W. A. Heurtley reached England at the end of July, and resumed duty in Athens on October 23rd. Early in August he read a paper to Section H of the British Association at Oxford, on some results of his Macedonian researches, and also lectured at Cambridge on his recent excavations. In addition to his routine duties in the Hostel and Library he prepared for the *Annual* an exhaustive report on his excavations at Vardaróftsa, which involved a journey to Salonika in January for further work on his finds. He combined with this a journey in Western Macedonia, to investigate the site of Bouboústi, and returned by Serfijé and Elassóna to Salonika. On March 21st he read a paper on Prehistoric Macedonia at the Open Meeting, and on April 19th went for three days to Mycenae to meet the parties of the Hellenic Travellers' Club, whom he escorted over the site. The rest of the session until May 31st he spent in Athens, and then left for Macedonia to carry out the excavation at Bouboústi which is described below. When this was finished he travelled for a week in Western Macedonia, he also visited Koritzá, and, after working at Salonika on his newly-found pottery, returned to Athens via Volo on July 3th.

The Archaeological Curator at Knossos.—Dr. Duncan Mackenzie, who was appointed by the Committee to this post, which was created as a result of the transfer to the School, by Sir Arthur Evans, of his Knossos property, as stated in the last Annual Report, the stipend being provided by the donor, reached Knossos on February 14th, and resided there continuously until mid-August. In addition to his duties in connection with the administration of the villa, Dr. Mackenzie made good progress with the rearrangement of the collection of specimens of Minoan pottery housed in the Palace, and gave help and counsel to Messrs. Forsdyke and Payne in regard to their excavations described below.

Students.—The number of full-time students during the past session was regrettably, and unaccountably, low, as only two were able to stay for the prescribed period of three months, but several persons who were visiting Greece for purposes of serious study were admitted to students' privileges for shorter periods.

Mr. J. T. Hawdon, B.A., Birmingham, and holder of an Oxford Diploma in Classical Archaeology, was admitted as Sachs Student. Reaching Greece at the beginning of the session, Mr. Hawdon studied in Athens and visited numerous

ancient sites in N. Greece and the Peloponnese, spending several weeks away from Athens, especially at Corinth and Delphi, in order to study excavations and museum work with a view to helping in the excavations at Sparta. His reading at Athens was largely concerned with the sites visited, and he had not begun to concentrate on a particular subject when he was unfortunately recalled to England late in February by urgent home affairs, and was unable to return to Greece.

Miss A. Masom, B.A., London, spent four months in Greece, arriving early in January; when weather permitted she visited most of the principal sites of the Greek mainland, and spent a week in Crete, in order to gain a general impression of the material surroundings of Greek civilisation, paying special attention to the chief religious centres.

The following were admitted as students for shorter periods :—Miss Susan Clark and Miss Enid Derham, B.A., of the University of Melbourne; Mr. B. Farrington, M.A., of the University of South Africa, Cape Town, who was making a special study of the Cretan literature of the seventeenth century; Professor and Mrs. Carlton Stanley, of McGill University, Montreal; Mr. R. B. Graham, M.A., who, after travelling in Magna Graecia and Sicily, visited several sites in Greece and made a short tour in Crete; Professor H. J. W. Tillyard; Miss H. L. Lorimer, who assisted Mr. Heurtley in his excavation at Bouboústi; Mr. H. G. G. Payne, who spent a few days in Athens on his way to and from his excavation at Knossos; Messrs. R. P. Longden, Fellow of Magdalen College, Oxford, and Ian Richmond, B.A., who came over from the British School at Rome; and Mr. Colin G. Hardie, of Balliol College, Oxford, holder of the Clarke Studentship, who carried out a comprehensive tour of the principal sites in N. Greece and the Peloponnese.

The privilege of residence in the Hostel was granted to the following, when rooms were available :—the Rev. Philip Usher, who has succeeded Dr. W. A. Wigram as Chaplain to the British Legation in Athens; Mr. Leonard Bower, of the British Legation; Sir Ronald Storrs, who passed through Athens on his way to take up his new post of High Commissioner of Cyprus; Mr. J. W. Crowfoot, an old Student of the School and now Director of the British School of Archaeology in Jerusalem; Professor R. Knox McElderry; Professor E. R. Dodds; Mr. H. A. Gibb, M.A., of the University of London; Mr. and Mrs. E. M. W. Tillyard; Mr. J. B. McCreeary, of Christ Church, Oxford; Messrs. H. B. Clark, D. Cairns (travelling with Mr. Hardie, the Clarke Student), Leigh Ashton, E. I. Halliday, R. W. Hutchinson, who also helped Mr. Heurtley at his excavation, and P. F. McCullagh, of McGill University, Montreal. Professor J. P. Droop, who generously devoted most of his three months' leave from the University of Liverpool to helping the Director at the Sparta excavations, also stayed a few days in the Hostel.

Visitors.—The improved facilities for travelling rapidly to Greece, together

with the increased security and better communications within the country, bring each spring a growing number of visitors to the School, which is glad to offer what help it can to make their stay more profitable. Mr. Heurtley again met two parties of the Hellenic Travellers' Club cruises at Mycenae, and among those who visited the School on various occasions were the Headmaster of Eton and Mrs. Alington, the Master of Marlborough, the Provost of Worcester College, Oxford, Professor K. Zachariah, of Calcutta, Professor J. H. Worthington, A.R.I.B.A., Professor S. Umehara, of Kioto Imperial University, Japan, Professor and Mrs. P. N. Ure, Lady Lawrence, Miss A. Conway, Mr. and Mrs. A. H. M. Jones (*en route* for the British Academy's excavations at Constantinople), and several parties of undergraduates from both Oxford and Cambridge, many of whom also visited Sparta while the excavations were in progress.

School Property.—The renewals and repairs mentioned in the last Report were completed by the beginning of the new session, and the garden has been improved by judicious felling and thinning, for which extra labour was required. As, however, the high cost of water under the new system makes it impossible to keep the garden-beds adequately watered during the summer drought, little can be done to ensure a continuous display of flowers.

A regrettable occurrence, which involved both unforeseen expense to the School and serious inroads on the Director's time, cannot be passed over. The north wall of the plot of land owned by the School to the north of Speusippos St., and (since 1924) enclosed in the *temenos* of the Gennadeion, collapsed for nearly its whole length in a torrential rainstorm in December. This collapse was to a large extent the direct result of relaying the pipe-line for the town's water-supply, and of heaping the upcast earth against the wall (in spite of protests made at the time). After about four months' negotiations, the Ulen Company, which had been carrying out this work, acknowledged their responsibility, and a cheque for Drs. 17,700 was accepted by the Director in full compensation, as representing the estimated cost of replacing the wall in its original condition. The presence of this loosened earth, and its pressure on the wall, which could not be foreseen when it was originally built by the architect of the Gennadeion, have made it essential to rebuild the fallen portion on a much more massive scale, with a deeper and wider foundation, and with buttresses against the inner face. The sum received in compensation amounts to only a quarter of the total cost of this work. The wall in its strengthened form is now secure against a repetition of a similar disaster, and the School property is correspondingly better protected. The work of rebuilding was carried out in June and July, under the Director's supervision. In this connection the kindness of the Director of the American School in allowing the builders to use water from the well in the Gennadeion garden must be gratefully acknowledged.

Open Meeting.—An Open Meeting was held on March 21st, at which the

Director gave an account of the Sparta excavations of 1926, and Mr. Heurtley spoke on 'Prehistoric Macedonia.'

Publications.—Volume XXVII of the *Annual*, which is now in the Press under the editorship of Mrs. Culley, is due to appear early next year. It contains two contributions by the Director on the Sparta excavations of 1926, and some miscellaneous papers by recent students of the School, in addition to Mr. Heurtley's account of his Vardaróftsa excavations; Dr. W. Miller reprints, with short comments, a most interesting account of the Cretan Rebellion of 1866, which was submitted by Finlay to *The Times*, and set up, but never published. Good progress has also been made with the second and final instalment of *The Unpublished Objects from Palaikastro*, which, it is hoped, will be published during the winter. This should now leave the way clear for an early start on the final publication of the results of the School's original excavations at Sparta, for which much of the material, as regards the Orthia sanctuary, is already in manuscript. The desirability of such a work has been emphasised in this Report from time to time during the past fifteen years, but various circumstances have led to its inevitable postponement. It seems to the Committee highly desirable that this plan should now be extended so as to comprise also a full publication of the results of the excavations carried out at Sparta during the last four years.

Excavations.—Besides the principal excavation by the School at Sparta, Mr. Heurtley carried out a short campaign on the small prehistoric site at Bouboústi in Macedonia, and at Knossos two pieces of work, originally initiated by Sir Arthur Evans, were carried out under the auspices of the School, namely, the exploration by Mr. E. J. Forsdyke, of the British Museum, of a Minoan Cemetery on the hillside which overlooks the Palace from the east, and that by Mr. H. G. G. Payne of some Geometric tombs north of the Palace, at Zafer Papoura. Accounts of these four pieces of work follow.

(1) **Sparta.**—This year's campaign at Sparta, though on a smaller scale than the previous three, was productive of quite satisfactory results. The Director and Mrs. Woodward left Athens on March 27th, and work began on the 29th, and lasted until May 21st. The other members of the party were Professor J. P. Droop and Mr. P. De Jong, who arrived on April 1st and 7th respectively. The Director gave his whole time to supervision on the site, and kept the records of inscriptions and stamped bricks and tiles; Mrs. Woodward kept the marble-inventory, and dealt with the small objects as found, and Professor Droop, who devoted most of his time to the laborious task of working over all the Geometric and Laconian pottery from the three previous campaigns on the Acropolis, with a view to publication, found time to clean and draw or photograph many of the more important small finds of the present campaign; his assistance and advice were of the greatest benefit to the Director at all times.

The first task was to move the quarters of the party, as the old excavation-house had been sold, and the new owner would not renew the lease; this was a

matter for less regret, as it had been seriously damaged by the earthquake in the late summer of 1926. A new house, which proved comfortable and quite convenient for a small party, was secured on the Tripolis road; it has been taken on a lease for twelve months from April 1st, 1927, with the option of extension. The Hellenic Government was ably represented by Dr. Th. Karachalios, Ephor of Antiquities for Laconia and Messenia. We were, however, unable to retain the services as foreman of Georgios Alexopoulos of Mycenae, who could not be spared from his own beat, but Demetrios Soterákos, a veteran from the days of the Orthia excavations, proved a conscientious and efficient deputy. Our number of workmen was usually about forty.

Once again our activities were divided between the Theatre and the Acropolis. At the former, the full length of the two retaining-walls has now been cleared: of the eastern wall, the portion left undug, from the foot of the outer staircase to the outer angle, has now been laid bare, and it was found that the marble facing-blocks were preserved for eight courses above the *torus*-moulding. They did not return past the angle, for the retaining-wall on this side was of poros blocks, with a strongly marked rustication, and the east face of the angle-blocks of marble was rusticated to match. The *torus* is not continued along this return beyond the angle-block. At a late Roman date the paved space east of the foot of the stairs had been built over with houses whose floor-level, with remains of pavements of *opus sectile*, lay flush with the *torus*-moulding of the wall, *i.e.* about three feet above the original level of the Parodos-pavement. The only find of interest in this area was a small, roughly finished head of Athena, inspired by the School of Pheidias, but itself of Imperial date.

The further exploration of the western retaining-wall has now made it certain that there was no external staircase to correspond to that on the east, and it seems unlikely that it was ever marble-faced for its whole length. In front of the bastion, which is only about two-thirds of the depth of that carrying the eastern staircase, we soon came upon a massive brick structure, which we fully cleared and found to be a great fountain-basin built of brick, with a semicircular internal apse at each end; its length was 13.35 m., its breadth 2.36 m., and the maximum depth one metre. The floor, paved with large bricks, was undamaged, and had a slight slope towards an escape-pipe at the east end. In removing the fallen brick and rubble from the basin we found various marble sculptures, most of which must have fallen from the ledge on the north side; these included a seated lion, in the attitude, but lacking the dignity, of that at Chaeronea, which was perhaps of late Hellenic workmanship, but had been pierced later through the back of the neck so that the mouth might act as a water-spout, a finely rendered boar, in bluish Laconian marble, charging with legs outstretched, the lower half of a poor figure of a tritones, and a small headless statuette of Herakles, in a cloak. On the ledge were two marble seats, without backs, *in situ*; one which occupied the central position had in front a spirited relief of an eagle with a snake in its beak, the other had a

palmette ornament on the front and each side. A similar seat was found fallen, in the basin, and another came to light outside it to the south. In front of the south wall we found *in situ* two rectangular marble troughs, of different sizes and patterns, fed by small channels from the main basin, and to judge by the traces of channels, there had been originally five in all. Both had been broken, and mended with iron rivets, and one bore an inscription round its edge in letters probably not later than the first century of our era, giving the name of the donor. This rested on an inverted architrave-block, and the other on a statue-base inscribed with a dedication which cannot be earlier than the reign of Caracalla; it is a duplicate of an inscription already known (*I.G. V. 1*, 547).

The style of construction supports these indications of late Roman date for the fountain, for it is built of brick, on a poor rubble footing, with a thin marble revetment. The bricks are largely re-used material bearing the stamp of the Skenotheke. Outside the basin, to the west, is a small paved space, which was perhaps originally roofed over. No sign was found of steps leading up from this court to the ledge on which were the seats; if access was intended, the steps must have been of wood. It is plain that this was a Nymphaeum of a modest sort, with a back wall rising above an open basin, and the presence of sculptures on the ledge in front of it is a typical feature of such buildings. We found no trace of pipes bringing the water, and perhaps there was originally some simple kind of aqueduct carried on piers in front of the retaining-wall. The lion's mouth may have been one of the supply-spouts.

East and south of the stage-area we found extensive remains of buildings, even more deeply buried than was the stage itself. A complete clearance of them is unlikely to be remunerative, and it is highly doubtful if anything of Hellenic date would come to light. To the south of a late Roman street 3.25 m. wide running behind the stage we followed for more than nine metres a fine wall of massive ashlar nearly 1.50 m. thick; east of this lay a mosaic pavement, also of late Roman date, with a geometric border, and from the west face of the wall sprang a row of flying buttresses spanning a narrow space which separates it from an adjacent brick wall. In this space, nearly two metres deeper than the mosaic, lay a brick pavement, which extended southwards as far as the inner face of the late Roman fortress-wall.

In the Theatre itself we uncovered some more of the front row of seats by means of a deep trench which followed the curve on which they are set out, and enabled us to clear also the gangway behind, and the water-channel in front of them. The front seats were damaged but not displaced, and the foot of another staircase was revealed at the point calculated by Mr. De Jong (No. VII on the general plan, *B.S.A. XXVI. Pl. XIV*). Seven more inscribed blocks, forming the west side of the channel, continue the series found here previously, and give us yet more names of Ephors and Nomophylakes of the reigns of Trajan and Hadrian. Other inscriptions found in this region include

a fragmentary list of Spartan names (*ca.* 400 B.C.) and a statue-base, bearing a Greek inscription in typical Constantinian lettering, in honour of a certain Publius Optatianus, Proconsul of Achaia. He is known hitherto from literary sources only, as a versifier whose flattering effusions won the heart of the Emperor Constantine and secured his own recall from exile and advancement to high office.

During the second half of the season attention was also paid to the remains of a bathing establishment (or large villa or gymnasium?) some fifty metres south of the Nymphaeum already described. A large mosaic pavement with a variety of geometric motives had already been partly cleared here in 1925 by Mr. Cuttle, and the building was found to extend north, east and west of this, but no other room had a mosaic floor. The structure shows traces of rebuilding, and the plan at the east end was very intricate; but enough was cleared to prove that the whole system dates from the Imperial period, and perhaps is all as late as the third or fourth century; even if fully uncovered neither plan nor incidental finds would be of much interest. In digging deep below the foundations of the north wall at one point we came upon a large quantity of fragments of Hellenic pottery, apparently local domestic ware of the fifth and fourth centuries B.C., but we have no reason to suspect that any important, or early, building occupied this area.

On the Acropolis, our first task was to complete the excavation of the building found last year, which partly underlies the back wall of the *cavea*, at a deep level. The building proved smaller and more ruinous than had been expected, and the south wall had entirely, and the east wall largely, disappeared. We have, however, practically determined the southward limit of the votive deposit, and no further excavation of the insignificant portion of it remaining is contemplated. The building must have been a small sanctuary, with a superstructure of mud brick on a cobble foundation, and presumably with architectural decoration of terracotta. From the scanty remains of the original votive deposit, in contrast with the later accumulation of mixed filling, it seems that its origin can hardly go back beyond the seventh century, for there was no specifically Geometric layer. The absence of votive objects inscribed with any other name than that of Athena leaves us with the conclusion that this was a subsidiary shrine of that Goddess, less ancient and famous than the Brazen House lying further up the hill.

The small objects found were again numerous and interesting. The archaic terracotta heads and *protomai*, mostly of local fabric, shew a wide range of type; a male helmeted head of bold style contrasts with the female heads, which much predominate. The bronzes were unimportant, except for a superb nude female statuette, probably Laconian work of the late sixth century (though it has also certain Ionian affinities); the attitude is puzzling, for the right hand is held forward and slightly raised, but holds no object, and the left, held out level from the elbow, is palm downwards. The rarity of the type

and the fineness of the preservation make this one of the most valuable finds from our four seasons' work on the Acropolis. Though we found no more of the 'Leonidas,' numerous interesting fragments of sculpture in Parian marble must be mentioned, including two pieces from a small frieze of lions attacking bulls, and a piece of a two-sided relief, curved in section, which shews the remains of a head of a helmeted Athena to the right, and on the reverse, part of a lion's mane. It front of her is the faintly incised inscription *Ἡποδαμια*. This is similar in style to a fragment found last year, also carved on both sides; the curve of the new bit suggests a shield, of an unusually thick section, too heavy to have been held by a statue, but possibly free-standing. Special mention must likewise be made of an archaic inscription, on a sadly damaged stele, which was found high up in the clay layer just inside the *cavea* wall. This contains the remains of a hymn to Athena, written boustrophedon, in an alphabet probably earlier than 500 B.C., on three sides of the stele (the fourth is missing). No complete phrase has survived after the opening invocation *Παλὰς Ἀθαναίᾳ* *θυ[γατὲρ Διός]*, but enough is preserved in the twenty-three lines of the text to shew that it was metrical throughout. It would be rash to suggest a definite attribution of authorship for such a fragmentary poem, but we must not overlook the possibility that it may be either from an otherwise unknown hymn to Athena by Alcman, or conceivably from the hymn which (as we know from Pausanias) Gitiadas, architect of the Brazen House, composed in her honour.

With the completion of the excavation of this votive deposit between the Chalkioikos and the Theatre, our main task on the Acropolis has been brought to a satisfactory end. That little or nothing of Hellenic date would be found by systematic exploration further east was confirmed by further trials made this year. Behind the centre of the *cavea* Byzantine and Roman walls alone came to light; still further east, on the ridge terminating in the Byzantine church explored in 1925-26, extensive tests shewed that the presence everywhere of collapsed Byzantine masonry, with no certain promise of classical remains beneath it, would make further excavation both dangerous and unprofitable.

(2) **Excavations at Bouboŭsti.**—The following account has been received from Mr. W. A. Heurtley. The party consisted of the Assistant Director and Mrs. Heurtley, Miss H. L. Lorimer and Mr. R. W. Hutchinson. The excavation began on June 6th. The site proving to be smaller than was anticipated and the deposit of no great depth, it was possible to clear the whole in ten days. Bouboŭsti lies in Western Macedonia, midway between Hrupsista and Lapsista, on the right bank of the Haliakmon. The discovery of the site was due to Dr. Pelekidis, who, while excavating Hellenic remains here in 1926, discovered the prehistoric pottery.

The settlement, which was only about 32 m. × 8 m. in area, and could not have consisted of more than a few huts, was built in and around a small dip in

the hillside. In the dip, the depth of the deposit averaged one metre with two occupation-levels; on the edge of the dip, 30 cm. with one occupation-level. The settlement stood on a fairly steep slope, and its lower side coincided with a line of rough terrace-walls and a cistern, built in Hellenistic times.

Apart from two well-preserved hearths, the remains consisted almost entirely of pottery, which, to judge by analogy with finds elsewhere and from a few imported sherds, should be assigned to the period *ca.* 1500-1000 B.C. This local pottery is all hand-made (with the exception of two pieces), painted ware being far more common than plain. The fabric of the former is good, the surface usually brick-red, light buff, or grey, well smoothed and slightly polished. The decoration is applied directly to the surface in matt-paint, black, purplish or red. The most common shapes are jugs with cut-away necks and open bowls with splaying rims and two horizontal lugs with vertical holes. Beakers with two high-swung handles also occur, as well as a local variety of the wish-bone handle. The decoration, which is strictly rectilinear, is extremely rich and varied. It is concentrated on the necks and shoulders of the vases, the lower parts being invariably left plain. Among the motives occur carefully-drawn meanders, Maltese crosses, broad zones filled with chequer-work patterns of alternate latticed and open diamonds and belts of hanging triangles, hatched and closed. A stylised bird and a stylised tree also occur. There is only one example of a spiral (pothook), and that associated with a triangle in triple outline.

Imported sherds are one Minyan, one Mycenaean (L.H. III *a*), one sub-Mycenaean and a few Proto-Geometric (?). A bronze pin of Early Geometric type was also found and an iron socketed spear-head.

The affinities of this pottery are with that class of pottery, matt-painted and plain, which flourished in Central Macedonia in the Third Period (*ca.* 1650-1150 B.C.), where the shapes and decorative motives can be traced back through their earlier stages to a remote past, the matt-painted technique replacing an earlier incised technique. This pottery, it now seems, spread gradually from Central Macedonia westwards along the whole length of Pindus (Pátele, Bouboústi, Thermon), southwards as far as Mt. Oeta (Lianokladhi III), and about the same time into Thessaly (hand-made jugs with cut-away necks, painted and plain, and painted from the Volo district), and perhaps, as Frankfort has recently suggested, eastwards into Anatolia.

Of the features which distinguish it in its original home, *i.e.* jugs with cut-away necks, wish-bone handles, and among decorative motives, the pot-hook spiral, two are found in combination at all the sites, and at Bouboústi and in Thessaly all three.

There can be little doubt that these features have racial significance, and suggest that we have to do with nomad tribes of common stock, of which the centre of diffusion was the Vardar valley, about the middle of the second

millennium B.C. Here a remnant of the same people remained in occupation until the fourth century B.C. The other sites, after short periods of occupation, were abandoned, some earlier, some later. Only in North Thessaly a secondary centre of diffusion at the beginning of the Iron Age is indicated. Here, the local style, reinforced by kindred Macedonian elements, fused with sub-Mycenaean and produced the Proto-Geometric style of Marmáriani, Volo and, at a somewhat later date, Hálos. How long this style continued to flourish in Thessaly is not yet certain. That the Boubousta folk contributed to its formation is clear from the large number of wheel-made jugs with cut-away necks in the Volo Museum, decorated with painted motives identical with those at Bouboústi.

On the conclusion of the excavation a tour was made in Western Macedonia with a view to discovering other sites. One prehistoric site was identified at Armenochóri near Florina, which, to judge by the pottery, belongs to the Monastir group. At another small mound at Vladovo, between Vodená and Lake Ostrovo, primitive hand-made sherds were collected, but the type could not be determined. [W. A. H.]

(3) **Knossos : Minoan Tombs.**—The following account has been received from Mr. Forsdyke. In accordance with the permit granted by the Hellenic Government to the Director of the British School dated April 16th, 1927, I began my excavation of the Mavro Spelio Cemetery at Knossos on May 3rd, and carried on the work with fifteen men until June 18th. I employed the same men for the week June 27th–July 2nd to fill in tombs and to clean up the site.

The cemetery, which lies on the hill opposite the Palace of Knossos across the river, was discovered by Sir Arthur Evans last year, and was partly explored by him then with my help. We found six chamber-tombs containing scanty remains of Middle and Late Minoan burials. This year I thoroughly trenched the area and found sixteen more tombs. They are all chambers cut in the soft rock, but many have two or more compartments. No burials were found intact, and there was very little pottery or other furniture, but the fragments found shew that some of the tombs were in constant use from M.M. II *b* to L.M. III *b*, and they were probably kept clear of pots and valuable offerings during that period.

The most important finds are :—

Tombs III and VII.—Three crystal magnifying lenses of modern form : small discs with one convex side.

Tomb VII.—A clay idol of a goddess holding up a child ; three gold earrings and a gold finger-ring ; and a steatite gem of L.M. III *b* date with design of two soldiers carrying double shields.

Tomb IX.—A gold finger-ring, bezel inscribed with nineteen letters of the Minoan linear script arranged along a spiral line, in the manner of the Phaistos disc.

Tomb XVII.—In this tomb was a deep pit, containing bones and pottery of exclusively M.M. II *b* date. It also contained a small cube of iron.

I also excavated the Mavro Spelio itself, a small cave in the same slope as the tombs, and found that it was a water-sanctuary. It consists of an inner spring-chamber and an outer apartment hewn in the rock with a shallow reservoir in its floor bordered with seats. Rough stairways lead to the entrance of the cave, which probably had a built façade. I cleared the area surrounding the cave and built a terrace-wall to facilitate approach, and fitted iron gates to the two best-preserved tombs. In Tomb V are collected and stored all the significant pieces of larnakes which were not wanted at the Candia Museum, and in Tomb I all the pithoi.

The excavation will be fully and finally published in the next *Annual* of the British School. [E. J. F.]

(4) **Knossos : Later Tombs.**—Mr. H. G. G. Payne reports that he excavated during May four tombs of the early Greek period, and one of the fifth century. The first and most important of these was a chamber tomb on the west side of the Zafer Papoura hill, about three-quarters of a mile from the Palace, close to the site of a Geometric tomb excavated some years ago by Sir Arthur Evans. It had contained a great number of vases, probably over a hundred, of the Proto-Geometric, Geometric and early Orientalising styles. The majority were broken, as the roof had collapsed, but enough remains in many cases to permit of satisfactory reconstruction. In addition to types already known, the earlier series includes new varieties, which it is hoped will throw light both on the evolution of the Geometric style in Crete and elsewhere, and on the relations of Geometric to late Mycenaean art. The Orientalising vases include very fine examples of a polychrome fabric of which one or two specimens were found in the tomb excavated by Sir Arthur Evans. Some of the new examples shew the style in a fuller stage of development than anything from Knossos hitherto known, and are remarkable for their bold design and brilliant colouring of red and dull black on a white background—a technique which, like some of the patterns, suggests connections with Cyprus. In the same tomb were found Rhodian and Proto-Corinthian vases; the best piece is an *oinochoe* of the developed Proto-Corinthian style. Another tomb in the immediate neighbourhood yielded nothing of interest, but two tombs at Fortezza, a village a short distance north of Knossos, provided a great quantity of early pottery similar to that already mentioned. The fifth-century tomb near by yielded some fragments of Attic pottery and a limestone palmette from a stele.

The Library.—The new shelving at the north end of the Library was completed before the new session began, and the Librarian has rearranged the sections concerned, so as to leave convenient room for expansion for the future. The fact must, however, be faced that almost all the other sections of the Library have very little space left for accessions, in spite of careful concentration and the removal of out-of-date works of which new editions have been

acquired. Nor is there much available storage-room for books so removed. The total number of works added during the session 1926-27 was 244, including 55 pamphlets and 42 bound volumes of periodicals. A considerable proportion of the remainder consisted of volumes, or parts, of works in continuation, which, together with binding, absorb much more than half of our annual grant. The most important accessions are due to the generosity of donors, but purchases include De Genouillac, *Céramique Cappadocienne* (2 vols.), and G. Millet, *Monuments de l'Athos*, vol. i.; and our set of the new edition of Beloch's *Griechische Geschichte* has now been completed.

Among donations by individuals, the following may be singled out for grateful acknowledgment: Ἀρχεῖα Α. καὶ Γ. Κουντουριώτου, iii. and iv., presented by the President of the Hellenic Republic (and placed appropriately in the Finlay Library); M. Rostovtzeff, *Social and Economic History of the Roman Empire*, and *History of the Ancient World*, I.; M. P. Nilsson, *History of Greek Religion*; Gisela Richter, *Ancient Furniture*; F. Poulsen, *Etruscan Tomb Paintings*; and O. M. Dalton, *Eastern Christian Art*, all presented by Dr. D. G. Hogarth; *Jerusalem* (2 vols.) presented by Sir Ronald Storrs; and the important and costly work on the Antiquities of Jerusalem, in six vols., by Vincent and Abel, presented by the Rev. Philip Usher. To Miss Hutton the Library is indebted for vol. iv. of Stephen MacKenna's translation of Plotinus, and for the *Supplementum Epigraphicum Graecum*, to date; to Mr. R. C. Bosanquet for Wood's *Theophrastus* and two other valuable works; to Mrs. Hasluck for the late F. W. Hasluck's *Letters on Religion and Folklore*; and to Lady Walston for the late Sir Chas. Walston's *Notes on Greek Sculpture*. Various books and pamphlets have also been presented by Messrs. H. Box, W. L. Cuttle, R. W. Hutchinson, W. Miller, D. P. Petrocchino, L. Rey, Miss E. Scott, Mr. G. A. D. Tait, and the Director. Special thanks are due to Mr. Leonard Bower, of the British Legation, for rescuing from among waste papers in the archive-room of the Legation many duplicates of official publications, dealing with Greek affairs in the nineteenth century, which have been duly incorporated in the Finlay Library.

The School is indebted also to the following Institutions and Societies for gifts of books, pamphlets or reports:—The Cambridge University Press (for the *Catalogue of the Maclean Collection of Greek Coins*, ii., the *Cambridge Ancient History*, vols. iii., iv., v., and the *Cambridge Mediaeval History*, vol. v.); the Palestine Exploration Fund; the Trustees of the British Museum; the Governments of Malta, of India and of Burma; the French Ministry of Instruction and Fine Arts; the Royal Society of Letters, Lund; the University of Uppsala; the Ny Carlsberg Museum; the Danskeselskab; the Greek Ministry of Education and Religion; the Greek Ministry of Public Economy; the Academy of Athens; the Committee for the Publication of the History of Chios; the Bulgarian Archaeological Institute; the Roumanian Academy (*Cultura Nationala*); the Roumanian Academy in Rome; the Ottoman Museums, Constantinople; the University of Michigan.

Miscellaneous donations of books and pamphlets have been received from the following authors :—Dr. M. Deffner, Professor W. Dörpfeld, Professor S. Eitrem, Dr. H. Frankfort, Dr. Edwin Freshfield, A. Hermann, W. A. Heurtley, Dr. D. G. Hogarth, Dr. P. Th. Justesen, D. G. Kambouroglou, N. D. Levides, Professor A. Mahr, Dr. B. D. Meritt, Dr. W. Miller, A. E. Remouchamps, Miss Gisela Richter, Dr. K. Ronczewski, Dr. Alan Rowe, Dr. G. A. S. Snijder, Professor G. Soteriou, the late Sir Charles Walston, I. S. Wile, and the Director.

Acknowledgments.—It is a pleasure to record again the indebtedness of the Director, Assistant Director, and the School as a whole, to Dr. K. Kourouniotis, head of the Archaeological Section of the Ministry of Education, and to the other officials of that service for their unfailing courtesy and help. Thanks are especially tendered to the following :—Drs. P. Kastriotis and K. Romaïos and Miss Papaspyrou, at the National Museum, for assistance in the matter of studying and displaying various finds from Sparta; Drs. S. Pelekides, Ephor of Macedonia, and Th. Karachalios, Ephor of Laconia and Messenia, for help and support during the School's excavations in their districts; and Dr. S. Xanthoudides, Ephor of the Museum at Candia, for facilities in connection with the excavations at Knossos. Our thanks are also due to Professors Ktenas and Skoufos of the University of Athens, for analysing certain objects found by Mr. Heurtley in Macedonia.

It need scarcely be added that our relations with our colleagues of the other Archaeological Schools continue to be of the utmost cordiality. It is with very real regret that we learn that Dr. B. H. Hill's long and distinguished tenure of the Directorship of the American School (which he has held since 1906) has now terminated, and that the Assistant Director, Dr. C. W. Blegen, is likewise leaving. The new Director is Professor Rhys Carpenter, and the Assistant Director is Dr. B. D. Meritt. The new British Minister, Sir Percy Loraine, Bt., K.C.M.G., has already shewn his friendly interest in the School in various helpful ways, and with Lady Loraine visited Sparta during the School's excavation season there. The other members of the Legation staff have also earned the cordial thanks of the School for help and support of divers sorts. The new Naval Mission, under Captain C. E. Turle, already includes several subscribers to the School, who make regular use of both the Library and the tennis-court. The officers of H.M. Consular Service again deserve our cordial thanks, especially Messrs. King, Vice-Consul at Salonika, and Purcell, Hon. Vice-Consul at Koritzá, for facilities provided for Mr. Heurtley in his Macedonian explorations. We wish also to thank Mr. G. L. Bailey, Manager, and the staff of the Lake Copais Company for hospitality provided for students of the School visiting the neighbourhood of their headquarters. The following gifts are gratefully acknowledged : sherds for the School collection, from Malta presented by Mr. J. H. Bliss, and from Poland by Mr. V. Gordon Childe; tennis-balls by Messrs. Peache and Turner, and a new tennis-net by Mr. H. Gooch.

Obituary.—The School has to deplore the death, during the last twelve months, of Dr. Walter Leaf, Sir Charles Walston and Professor J. B. Bury.

The School has suffered a serious loss during the past session, both financially and otherwise, through the death of Dr. Walter Leaf. Dr. Leaf took an active part in the foundation of the School and served as Hon. Treasurer during the first ten years, when it was a constant struggle to make both ends meet. Not only did the Committee from the first owe much to his wise advice and prudent management of the finances, but for many years he personally contributed £100 a year to its funds, and up to the date of his death his annual contribution was £50. Not long after he handed over the Treasurership to Mr. Vincent Yorke he became one of the Trustees of the School, and although of late years the increasing demands made upon his time by his leading position in the banking world prevented his regular attendance at meetings of the Committee, his interest in the School and its concerns never failed and his wise counsel was always at its disposal.

It will not be forgotten that Dr. Leaf also found time from 1912 onwards to contribute several articles of permanent value to the *Annual* on the topography of the Troad, based on his studies of the Iliad and Strabo.

Though his own long-cherished scheme for a composite edition of Strabo's books dealing with Asia Minor was not achieved during his lifetime, his own volume, *Strabo on the Troad*, set a standard which subsequent workers will find it hard to equal.

Sir Charles Walston's connection with the School had also been of long duration. As Director of the American School of Classical Studies in Athens he was in close touch with the work and personnel of the British School, and after he settled at Cambridge he served for many years on the School Committee. He revisited Athens on several occasions, and on his last visit to the School in 1926 shewed that his interest in its activities and welfare was unabated.

Professor J. B. Bury had been for many years an Honorary Student of the School and had contributed articles to two early volumes of the *Annual* on the battles of Marathon and Thermopylae, the fruits of a visit to Greece. His vast range of erudition enabled him to follow and appreciate the work of the School and its students over almost the whole field of Greek learning.

Finance.—The Revenue Account for the year shews a debit balance of £451 4s. 9d. as compared with a credit balance of £984 os. 11d. for the preceding year.

As pointed out in the preceding report the combined results of the two years 1924-1925 and 1925-1926 shewed a loss of £467, and if this year's result is added thereto, the already slender funds of the School have dwindled by nearly £1,000 in three years.

Annual Subscriptions have increased from £842 to £863, but expenses have been swollen by further necessary expenditure on Repairs and the cost of the Rebuilding of Wall previously mentioned in the Report.

It is only too apparent that the School was never in greater need of further financial support.

MISS HUTTON proposed the following motion, which was seconded by MR. A. J. TOYNBEE and carried unanimously :—

“ That SIR ARTHUR EVANS and DR. D. G. HOGARTH be re-elected members of the Committee, that MR. A. J. B. WACE be elected a member of the Committee, that MR. V. W. YORKE be re-elected Hon. Treasurer and that MR. M. S. THOMPSON be re-elected Hon. Secretary.”

The nomination of MR. V. W. YORKE to be a Trustee of the School, in the place of the late DR. LEAF, was approved.

The Chairman, DR. MACKAIL, then moved the adoption of the Annual Report, which was seconded by the REV. A. G. BATHER, put to the Meeting and carried unanimously.

The Director, MR. A. M. WOODWARD, then gave an account of the work of the School at Sparta during the Session; he also spoke of MR. PAYNE's excavations of tombs at Knossos.

A vote of thanks to the Chairman was moved by MR. G. A. MACMILLAN and carried with applause.

THE BRITISH SCHOOL AT ATHENS.

1926-1927.

RECEIPTS AND EXPENDITURE ON ACCOUNT OF REVENUE.

3RD OCTOBER, 1926, TO 2ND OCTOBER, 1927.

	£	s.	d.		£	s.	d.
Subscriptions received during the year	863	16	1	House Maintenance (as provided from London to August 31st, 1927)	168	18	7
Subscription received for the year 1924-1925	1	1	0	Hostel Maintenance (as provided from London to August 31st, 1927)	229	17	10
Subscriptions received for the year 1925-1926	20	11	0	Salary—Director	500	0	0
Government Grant	500	0	0	Salary—Assistant Director	250	0	0
Grant by the Commissioners of the Exhibition of 1851	200	0	0	Salary—Architect	100	0	0
Interest on Investments to July 5th, 1927	210	0	0	Salary—Assistant Secretary	10	0	0
Interest on Deposit to June 30th, 1927	20	6	2	Publication of <i>Annual</i>	416	11	6
Sale of Annuals (Vols. I-XXVI)	180	1	11	Rent	10	0	0
Receipts from Hostel	155	11	6	Printing, Postage, etc.	66	15	7
Special Donations for Excavations at Sparta	57	8	0	Audit Fee	5	5	0
Maintenance of Knossos £ s. d. By Sir Arthur Evans 200 0 0				Expenditure on Excavations at Sparta	390	13	3
Interest on Investments	154	4	9	Expenditure on Excavations at Mycenae	22	5	0
	354	4	9	Secretarial Assistance (Athens)	34	0	6
Balance being Excess of Expenditure over Receipts	451	4	2	Special repairs and renewals	119	0	0
				Cost of rebuilding Wall	154	17	9
				Sundry Expenses	38	16	8
				Maintenance of Knossos			
				Salary and Expenses £ s. d. of Curator.	250	0	0
				Other Expenses.	247	2	11
					497	2	11
	£3,014	4	7		£3,014	4	7

RECEIPTS AND EXPENDITURE ON CAPITAL ACCOUNT.

3RD OCTOBER, 1926, TO 2ND OCTOBER, 1927.

	£	s.	d.		£	s.	d.
Donations as per List	147	0	7	Library	76	2	2
Entrance Fees	14	14	0	Balance, being Excess of Receipts over Expenditure	85	12	5
	£161	14	7		£161	14	7

BALANCE ACCOUNT—2ND OCTOBER, 1927.

	£	s.	d.		£	s.	d.
Subscriptions paid in advance	18	16	0	Investments—			
Anniversary Fund	289	0	6	£2,000 India 3% Stock at par	4,850	0	0
The Gustav Sachs Trust Fund				£3,000 5% War Stock at 95			
(Income)	46	16	3		£	s.	d.
Macedonian Exploration Fund	33	11	4	Cash—Deposit Account	500	0	0
Fund for the support of Anna				Cash—Less Overdraft	55	7	3
Sokrides	41	0	0				
Knossian Tombs Fund	1	16	0				
Maintenance of Knossos Fund							
(Capital)	109	8	0				
Balance, represent-							
ing the assets of							
the School other							
than land, build-							
ings and library							
as per last ac-	£	s.	d.				
count	5,184	2	2				
Less Balance of							
Revenue Ac-							
count for the							
year	451	4	2				
	4,732	18	0				
Add Balance of							
Capital Ac-							
count for the							
year	85	12	5				
	£5,358	18	6				

THE GUSTAV SACHS TRUST FUND.

INCOME AND EXPENDITURE ACCOUNT.

3RD OCTOBER, 1926, TO 2ND OCTOBER, 1927.

	£	s.	d.		£	s.	d.
Balance from last account	113	10	3	Studentship—Mr. Hawdon	100	0	0
Interest from Investments	33	6	0	Balance to be carried forward	46	16	3
	<u>£146</u>	<u>16</u>	<u>3</u>		<u>£146</u>	<u>16</u>	<u>3</u>

THE MACEDONIAN EXPLORATION FUND.

3RD OCTOBER, 1926, TO 2ND OCTOBER, 1927.

	£	s.	d.		£	s.	d.
Donation from British Association	40	0	0	To Grant (Mr. W. A. Heurtley) .	100	0	0
Balance from last account	93	11	4	Balance	33	11	4
	<u>£133</u>	<u>11</u>	<u>4</u>		<u>£133</u>	<u>11</u>	<u>4</u>

KNOSSIAN TOMBS FUND.

3RD OCTOBER, 1926, TO 2ND OCTOBER, 1927.

	£	s.	d.		£	s.	d.
Donations as per list	174	6	0	Expenditure	172	10	0
				Balance	1	16	0
	<u>£174</u>	<u>6</u>	<u>0</u>		<u>£174</u>	<u>6</u>	<u>0</u>

MAINTENANCE OF KNOSSOS (CAPITAL FUND).

3RD OCTOBER, 1926, TO 2ND OCTOBER, 1927.

	£	s.	d.		£	s.	d.
Endowment by Sir Arthur Evans	6,800	0	0	Purchase of Stock as under :—			
				£3,200 Belgium 7% Loan	6,690	12	0
				£3,200 German 7% Loan			
				Balance being funds unin- vested	109	8	0
	<u>£6,800</u>	<u>0</u>	<u>0</u>		<u>£6,800</u>	<u>0</u>	<u>0</u>

Examined, checked and found correct,

W. CRANSTOUN TODD,

3, Cannon Street, London, E.C. 4.

20th October, 1927.

Chartered Accountant.

DONATIONS—1926—1927.

	£	s.	d.
All Souls' College	50	0	0
Barden, Mrs.	1	0	0
Benton, Miss	2	2	0
Cheetham, Sir M.	20	0	0
Darbishire, R. S.	2	0	0
Edwards, A. T.	1	1	0
Edwards, W.	1	1	0
Hellenic Travellers' Club	5	3	7
Hicks, W. M.	2	0	0
Hobson, W.	2	2	0
Hurle, J. C.	5	0	0
Johnson, Miss L.	1	0	0
Laurie, G. E.	1	0	0
Lotus, S. S.—Collection	6	17	0
Low, Miss J.	5	0	0
Pybus, Mrs.	1	0	0
Queen's College, Oxford	5	0	0
Redden, Miss M.	2	2	0
Tillyard, E. M. W.	2	0	0
Thompson, A.	2	2	0
University of London	25	0	0
Woods, R. W.	4	10	0
	<u>£147</u>	<u>0</u>	<u>7</u>

SPECIAL DONATIONS FOR EXCAVATIONS AT SPARTA.

	£	s.	d.
British Academy	25	0	0
Empedocles, Mr., Mrs. and Miss	1	17	0
Eumorfopoulos, N.	2	0	0
Evans, C. P.	1	1	0
Fanning, Miss	2	2	0
Greenwood, L. H. G.	2	2	0
Hellenic Travellers	17	5	0
Hobson, B.	1	1	0
Thompson, H.	5	0	0
	<u>£57</u>	<u>8</u>	<u>0</u>

SPECIAL DONATIONS FOR KNOSSIAN TOMBS FUND.

	£	s.	d.
Beazley, Prof. J. D.	5	5	0
Beresford, Jones	1	0	0
Colegate, A.	5	5	0
Dawkins, R. M.	5	0	0
Droop, Prof. J. P.	3	3	0
Evans, Sir A.	50	0	0
Farnell, Dr. L. R.	1	1	0
Garfit, G. A.	1	1	0
Hall, Dr. H. R.	10	10	0
Hill, G. F.	5	5	0
Hogarth, D. G.	2	2	0
Lamb, Miss W.	5	5	0
Last, H. M.	5	5	0
Lloyd, A. H.	5	0	0
Macmillan, G. A.	25	0	0
Oppenheimer, H.	5	0	0
Price, Miss E. R.	5	0	0
Raphael, O. C.	10	0	0
Smith, A. H.	3	3	0
Society of Antiquaries	10	0	0
Thompson, M. S.	10	0	0
Worsley, Sir W.	1	1	0
	<u>£174</u>	<u>6</u>	<u>0</u>

ANNUAL SUBSCRIPTIONS—1926-1927.

	£	s.	d.
University of Cambridge	100	0	0
McGill University	20	0	0
Victoria University of Manchester	5	0	0
University of London	25	0	0
University of Toronto	20	10	7
University College of South Wales and Monmouthshire	2	0	0
University College, Reading	2	0	0
University College, Oxford	2	0	0
The Society for the Promotion of Hellenic Studies	100	0	0
Society of Antiquaries	5	5	0
Balliol College, Oxford	5	5	0
Brasenose College, Oxford	5	0	0
Caius College, Cambridge	10	0	0
Christ Church, Oxford	30	0	0
Corpus Christi College, Oxford	5	0	0
Emmanuel College, Cambridge	5	0	0
King's College, Cambridge	10	0	0
Magdalen College, Oxford	20	0	0
New College, Oxford	5	0	0
Oriel College, Oxford	10	0	0
St. John's College, Oxford	5	0	0
Pembroke College, Cambridge	5	0	0
Somerville College, Oxford	2	2	0
Trinity College, Cambridge	10	10	0
Trinity College, Oxford	2	2	0
Wadham College, Oxford	2	2	0
Balliol College Library	3	3	0
Fisher Library	2	0	0
Leeds Library	2	0	0
London Library	2	0	0
St. John's College Library	2	0	0
Westminster School Library	1	1	0
L'Association de Lectures Philologiques Lausanne	2	0	0
Carlsberg Glyptothek, Copenhagen	2	0	0
Otago Institute, Dunedin	2	2	0
People's Free Reading Room and Library	2	0	0
Glyn Mills & Co.	5	5	0
City of Westminster	2	0	0

Carried forward £44¹ 7 7

	£	s.	d.
Brought forward	441	7	7
Adcock, F. E.	2	2	0
Aldington, Mrs.	2	2	0
Allen, T. W.	1	1	0
Ashby, Thomas	1	1	0
Ashmole, B.	2	2	0
Bailey, C.	1	1	0
Bailey, J. C.	1	0	0
Bagnani, Mrs. E. R.	1	1	0
Barber, E. A.	1	1	0
Barbour, G. F.	2	2	0
Barden, Mrs. M.	1	0	0
Barlow, Sir T.	2	2	0
Barrington, Mrs. R.	1	1	0
Beazley, J. D.	1	1	0
Benecke, P. V. M.	2	2	0
Benson, E. F.	2	0	0
Benton, Miss S.	2	2	0
Bevan, E. R.	1	0	0
Blackburn, Mrs. V. P.	1	1	0
Blomfield, Sir R. J.	2	2	0
Boethius, Dr. A.	2	2	0
Bosanquet, Miss E. P.	1	0	0
Bosanquet, Prof. R. C.	2	2	0
Bower, L.	2	2	0
Briggs, Miss M. G.	3	3	0
Brooks, E. W.	2	0	0
Bryher, W.	2	2	0
Budden, Prof. L. B.	2	2	0
Bullard, R. W.	1	1	0
Buckler, W. H.	1	0	1
Burnett, Sir J. J.	1	1	0
Bury, Prof. J. B.	2	2	0
Buxton, A. F.	1	1	0
Byron, R.	1	1	0
Campion, C. T.	2	2	0
Carlisle, Miss H.	1	1	0
Caskey, Mrs. L. D.	1	1	0
Chance, A. F.	2	2	0
Chapman, Miss F.	1	1	0
Clarke-Thornhill, T. B.	1	0	0
Colegate, Mr. and Mrs. A.	2	2	0
Cooke, R.	1	1	0
Cow, Mrs. D.	2	2	0
Crowfoot, J. W.	2	2	0
Culley, Mrs. E. B.	1	1	0
Dawes, Miss E. A. S.	2	2	0
Dawkins, Prof. R. M.	2	2	0
Doll, C. C. T.	4	4	0
Droop, Prof. J. P.	5	5	0
Droop, Miss L.	2	2	0
Dundas, R. H.	2	0	0
Eddy, C. B.	2	0	0
Edmonds, Wing-Com- mander	1	0	0
Carried forward	533	1	7

	£	s.	d.
Brought forward	533	1	7
Elliot, Sir F. E. H.	2	0	0
Empedocles, Mr., Mrs. and Miss	3	3	0
Eumorfopoulos, N.	2	0	0
Evans, Sir A. J.	10	0	0
Farrington, B.	2	2	0
Fels, Willis	2	0	0
Fletcher, H. M.	1	1	0
Forster, Prof. E. S.	1	0	0
Fort, J. A.	1	0	0
Fotheringham, J. K.	1	0	0
Furieux, L. R.	1	0	0
Gallop, R. A.	1	1	0
Gardiner, E. Norman	2	0	0
Gardner, Prof. E. A.	2	2	0
Gardner, Prof. Percy	2	2	0
Garstang, Prof. J.	2	0	0
Gerstley, Mrs. J.	2	2	0
Giveen, R. L.	1	1	0
Gomme, A. W.	2	0	0
Gooch, G. P.	1	1	0
Goodwin, J. A.	2	2	0
Gordon, H. P.	2	2	0
Griffith, F. L.	1	1	0
Haigh, P. B.	2	2	0
Hall, H. R.	1	1	0
Halliday, Miss C.	1	0	0
Halliday, Prof. W. R.	1	1	0
Handcock, Dr. W.	2	2	0
Hart, P.	1	1	0
Hett, Capt. W. S.	1	1	0
Hill, G. F.	2	2	0
Hogarth, D. G.	1	1	0
Hopkinson, Rev. J. H.	1	1	0
Hutton, Miss C. A.	5	5	0
Impey, E.	2	2	0
Keen, H. H.	2	0	0
Kenyon, Sir F. G.	1	1	0
Lamb, Miss W.	2	2	0
Lambert, Rev. L.	1	0	0
Lascelles, Viscount	2	2	0
Laurie, G. L.	2	2	0
Lawrence, Lady	1	10	0
Leaf, Walter	50	0	0
Leconfield, Lady	1	1	0
Lindley, Miss J.	1	1	0
Lloyd, Miss A. M.	1	1	0
Lloyd, Miss M. E. H.	1	1	0
Loraine, Sir P. L.	5	0	0
Lorimer, Miss H. L.	2	0	0
Low, Miss J. S.	2	2	0
Macan, R. W.	1	1	0
MacIver, D. R.	10	0	0
Macmillan, G. A.	50	0	0
Carried forward	637	4	7

ANNUAL SUBSCRIPTIONS.

321

	£	s.	d.
Brought forward	637	4	7
Macmillan, W. E. F.	1	1	0
Major, Miss E. H.	2	2	0
Malcolm, Lady E.	1	1	0
Maufe, F. B.	1	1	0
Mayor, R. J. G.	1	1	0
Meikle, Mrs.	2	2	0
Miller, W.	7	0	0
Milne, Mrs. J. G.	2	2	0
Milne, J. G.	1	1	0
Mitchison, Mrs.	1	0	0
Moloney, W. J.	1	1	0
Mond, Lady	2	2	0
O'Connell, Miss K.	2	2	0
Ormerod, Prof. H. A. and M. R.	1	1	0
Palairot, C. M.	2	0	0
Pantin, Mrs.	10	6	
Parkin, Miss G.	1	1	0
Pearson, Miss E. R.	2	0	0
Pennant, Hon. Alice Douglas	1	1	0
Penoyre, J. B.	2	2	0
Penrose, Miss E.	1	1	0
Perram, C. H.	2	2	0
Pesel, Miss Louisa F.	1	1	0
Petrocochino, D. P.	2	2	0
Pickard-Cambridge, A. W.	2	2	0
Piddington, J. G.	2	2	0
Pollock, Sir F.	1	1	0
Radford, Miss E.	1	1	0
Rendall, Dr. G. H.	2	0	0
Rendel, G. W.	2	2	0
Richards, Miss C. D.	2	2	0
Richter, Miss G. M. A.	1	1	0
Robertson, D. S.	2	0	0
Roberts, Prof. W. Rhys.	1	1	0
Robinson, Dr. W.	2	2	0
Rodd, Sir R.	1	1	0
Rush, Mrs.	1	0	0
Carried forward	798	16	1

	£	s.	d.
Brought forward	798	16	1
Russell, A. G.	1	0	0
Sadler, Sir M.	2	0	0
Salter, Mrs. H. de G.	1	1	0
Seaman, Sir O.	1	1	0
Seeböhm, H.	2	2	0
Seltman, C. T.	2	2	0
Shove, Miss E.	1	1	0
Sikes, E. E.	1	1	0
Sloane, Miss E. J.	2	2	0
Smith, A. H.	1	1	0
Stewart Richardson, Miss G.	1	1	0
Tancock, Lt.-Col. A. C.	1	1	0
Taylor, C. F.	1	1	0
Thompson, M. S.	5	0	0
Tod, M. N.	2	0	0
Toynbee, Prof. A. J.	2	0	0
Tuke, Miss M. J.	1	1	0
Turle, Capt. C.	1	1	0
Ure, Prof. P. N.	2	0	0
Usher, The Rev. P.	1	1	0
Vince, J. H.	1	0	0
Wace, A. J. B.	2	2	0
Walker, Mr. and Mrs. J. S.	3	3	0
Walston, Sir C.	1	1	0
Wells, J.	2	2	0
Whatley, N.	2	0	0
Whibley, Leonard	2	2	0
Wigram, The Rev. W. A.	1	1	0
Willans, J. B.	1	1	0
Wilson, Lt.-Col. H. C. B.	1	1	0
Wilson, Sir H. F.	2	0	0
Withers, Dr. P.	2	2	0
Woodhouse, Prof. W. J.	2	2	0
Woodward, A. M.	2	2	0
Woodward, W. H.	2	2	0
Wyndham, Hon. M.	1	1	0
Yorke, V. W.	5	0	0

£863 16 1

Subscriptions received during the year :—

	£	s.	d.	£	s.	d.
For 1924-1925. Woodward, A. M. . . .				1	1	0
For 1925-1926. Corpus Christi College,						
Oxford	5	0	0			
City of Westminster	2	0	0			
University of Sydney	2	0	0			
Aldington, Mrs.	2	2	0			
Boethius, Dr.	2	2	0			
Bower, L.	1	1	0			
Campion, C. T.	2	2	0			
Moloney, W. J.	1	1	0			
Mond, Lady	2	2	0			
Woodward, A. M.	1	1	0			
				20	11	0

Subscriptions received in advance :—

Balliol College	5	5	0			
Adcock, F. E.	2	2	0			
Burnett, Sir J. J.	1	1	0			
Haigh, P. B.	2	2	0			
O'Connell, Miss K.	2	2	0			
Perram, C. H.	2	2	0			
Sadler, Sir M.	2	0	0			
Seebohm, H. E.	2	2	0			
				18	16	0

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- (1) Donors, other than Corporate Bodies, of £10 and upwards.
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The Hon. Treasurer would be glad to be informed of any changes of address or errors in this list, which is made up to December 31st, 1928.

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* Address to the Reader in Classical Archaeology, Museum of Classical Archaeology, Little St. Mary's Lane, Cambridge.

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 LONDON LIBRARY, St. James' Square, S.W. 1.
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 WESTMINSTER, CITY OF, PUBLIC LIBRARY.
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HONORARY STUDENTS OF THE SCHOOL.

1886—1928.

*Prof. J. B. Bury. LL.D., Litt.D., D.Litt.	King's College, Cambridge. Elected 1895.
Sir Arthur J. Evans. LL.D., D.Litt., F.R.S.	Late Keeper of the Ashmolean Museum, Oxford. Elected 1895.
Prof. J. Linton Myres. M.A., D.Sc. (Wales).	Late Fellow of Magdalen College, Oxford. Elected 1896.
Prof. Ernest Gardner. Litt.D.	Director of the School, 1887—1895. Elected 1897.
*Prof. A. van Millingen. M.A., D.D.	Professor of History at Robert College, Constantinople. Elected 1904.
*W. H. Forbes. M.A.	Late Fellow of Balliol College, Oxford. Elected 1906.
Prof. W. J. Woodhouse.	Professor in the University of Sydney. Formerly Student of the School. Elected 1908.
A. J. B. Wace. M.A.	Late Fellow of Pembroke College, Cambridge. Director of the School, 1914—1923. Elected 1912.
Prof. J. D. Beazley. M.A.	Student and Tutor of Christ Church, Oxford. Elected 1914.
E. N. Gardiner. D.Litt.	Corpus Christi College, Oxford. Elected 1914.
Prof. R. McG. Dawkins. M.A.	Hon. Fellow of Emmanuel College, Cambridge. Director of the School, 1906—1914. Elected 1914.
*F. W. Hasluck. M.A.	Late Fellow of King's College, Cambridge. Formerly Assistant Director and Librarian of the School. Elected 1915.
W. Miller. M.A.	Elected 1926.

* Deceased.

STUDENTS OF THE SCHOOL.¹

1886—1928.

Ernest A. Gardner. Litt.D.	Formerly Fellow of Gonville and Caius College. Vice-Chancellor (1923—26), Yates Professor of Archaeology and Public Orator in the University of London. Admitted 1886—87 as Cambridge and Craven University Student. Director of the School, 1887—1895. Hon. Student of the School.
*David G. Hogarth. M.A., D.Litt., C.M.G.	Fellow and formerly Tutor of Magdalen College, Oxford, and first Craven Fellow. Keeper of the Ashmolean Museum, Director of the School 1897—1900. Admitted 1886—87. Re-admitted (for work in Cyprus) 1887—88.
*Rupert C. Clarke. M.A.	Exeter College, Oxford. Rector of Ellesborough, Bucks, and Rural Dean of Wendover. Admitted 1886—87.
F. H. H. Guillemard. M.A., M.D., F.L.S., etc.	Gonville and Caius College, Cambridge. First University Reader in Geography. Admitted (for work in Cyprus) 1887—88.
Montague R. James. Litt.D.	Provost of Eton. Late Director of the Fitzwilliam Museum. Admitted (for work in Cyprus) 1887—88, with grant of £100 from the University, Cambridge.
R. Elsey Smith. F.R.I.B.A.	Professor of Architecture and Construction, University College, London. Appointed to Studentship of Royal Institute of British Architects, 1887—88.
R. W. Schultz Weir (R. Weir Schultz).	Admitted as Gold Medallist and Travelling Student in Architecture of the Royal Academy of Arts, 1887—88. Re-admitted 1888—89, 1889—90.
*Sidney H. Barnsley.	Admitted as Student of the Royal Academy, 1887—88. Re-admitted 1889—90, 1890—91.
J. A. R. Munro. M.A.	Rector of Lincoln College, Oxford. Admitted (for work in Cyprus) 1888—89. Re-admitted (for same purpose) 1889—90.
H. Arnold Tubbs. M.A.	Pembroke College, Oxford. Professor of Classics at University College, Auckland, N.Z. Craven University Fellow. Admitted (for work in Cyprus) 1888—89. Re-admitted (for same purpose) 1889—90.
Sir J. G. Frazer. O.M., LL.D., D.C.L.	Fellow of Trinity College, Cambridge. Admitted 1889—90.
†William Loring. M.A.	Late Fellow of King's College, Cambridge. Warden of Goldsmiths' College, New Cross. Secretary of the School, 1897—1903. Appointed to Cambridge Studentship, 1889—90. Re-admitted as Craven University Student, 1890—91, 1891—92, and 1892—93.

¹ * Before a name signifies "deceased." † Signifies "died on Active Service." For the war-service, military and otherwise, rendered by Students of the School, see Vol. XXIII, p. viii.

* Deceased.

† Died of wounds, October 22nd, 1915.

- W. J. Woodhouse. M.A. Queen's College, Oxford. Professor of Greek in the University of Sydney, N.S.W. Formerly Lecturer in Ancient History and Political Philosophy at the University of St. Andrews. Appointed to Oxford Studentship, 1889—90. Re-admitted as Craven University Fellow, 1891—92 and 1892—93. Re-admitted 1908, 1921. Honorary Student of the School.
- G. C. Richards. M.A. Late Fellow of Hertford College. Canon of Durham and Professor of Greek in the University of Durham. Admitted as Craven University Fellow, 1889—90. Re-admitted 1890—91.
- O. H. Parry. M.A. Magdalen College, Oxford. Vicar of All Hallows, East India Dock. Formerly Archbishop's Missioner to the Nestorian Christians. Admitted 1889—90.
- J. F. R. Stainer. M.A., B.C.L. Magdalen College, Oxford. Admitted 1889—90.
- *R.A.H. Bickford-Smith. M.A., F.S.A. Trinity College, Cambridge. Admitted 1889—90.
- *A. G. Bather. M.A. Late Fellow of King's College, Cambridge. Late Assistant Master at Winchester College. Admitted 1889—90. Re-admitted 1891—92, on appointment to the Cambridge Studentship; 1892—93 as Prendergast Greek Student; and again, 1893—94, as Cambridge Student.
- E. E. Sikes. M.A. Fellow and Tutor of St. John's College, Cambridge. Appointed to Cambridge Studentship, 1890—91.
- J. G. Milne. D.Litt. Corpus Christi College, Oxford. Late Assistant Secretary in the Board of Education. Appointed to Oxford Studentship, 1890—91.
- H. Stuart Jones. M.A. Fellow and formerly Tutor of Trinity College, Oxford. Principal of the University College of North Wales. Late Camden Professor of Ancient History in the University of Oxford. Formerly Director of the British School at Rome. Admitted as Craven University Fellow, 1890—91. Re-admitted 1892—93.
- Miss Eugénie Sellers (Mrs. S. Arthur Strong). Litt.D. (Manchester), F.S.A. Life Fellow of Girton College, Cambridge. Late Assistant Director of the British School at Rome. Formerly Keeper of the Duke of Devonshire's Collections. Admitted 1890—91.
- F. Brayne Baker. M.A. Sometime Scholar of Christ's College, Cambridge. Assistant Master at Malvern College. Admitted 1891—92.
- C. C. Inge. M.A. Magdalen College, Oxford. Vicar of St. Giles', Oxford. Appointed 1891—92 to the Oxford Studentship.
- E. F. Benson. B.A. King's College, Cambridge. Admitted 1891—92, with grant of £100 from the Worts Fund at Cambridge; 1892—93 on appointment to the Cambridge Studentship; 1893—94 as Craven Student; and 1894—95 as Prendergast Student.
- J. G. Piddington. B.A. (J. G. Smith). Magdalen College, Oxford. Admitted 1891—92. Re-admitted 1895—96.
- V. W. Yorke. M.A. Late Fellow of King's College, Cambridge. Hon. Treasurer of the School. Admitted 1892—93. Re-admitted 1893—94.

- J. L. Myres. D.Sc.,
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- R. J. G. Mayor. M.A., C.B. Late Fellow of King's College, Cambridge. Assistant Secretary in the Board of Education. Admitted 1892-93.
- R. C. Bosanquet. M.A. Trinity College, Cambridge. Late Professor of Classical Archaeology in the University of Liverpool. Assistant Director of the School, 1899-1900. Director 1900-1906. Admitted 1892-93. Re-admitted 1894-95. Re-admitted as Craven University Student 1895-96 and 1896-97.
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- E. R. Bevan. M.A. New College, Oxford. Admitted 1893-94.
- A. F. Findlay. M.A. Sent out as holder of Brown-Downie Fellowship by the United Presbyterian Church, Divinity Hall, Edinburgh. Admitted 1894-95.
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- J. E. Brooks. M.A. St. Peter's College, Cambridge. Admitted 1894-95. Re-admitted as Associate 1896-97.
- *H. Awdry. M.A. New College, Oxford. Assistant Master at Wellington College. Admitted 1894-95.
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- Archibald Paterson. University of Edinburgh. Admitted 1895-96.
- C. R. Rowland Clark. Student of the Royal Academy. Appointed 1895-96, and re-appointed 1896-97, by the Managing Committee to an Architectural Studentship.
- C. C. Edgar. B.A. Oriel College, Oxford. Inspector of Antiquities for Lower Egypt. Admitted 1895-96, and re-admitted 1896-97 (as Craven University Fellow), 1897-98 and 1898-99.
- F. R. Earp. M.A. Late Fellow of King's College, Cambridge. Admitted 1896-97.
- *F. A. C. Morrison. M.A. Jesus College, Cambridge. Admitted (as Prendergast Greek Student) 1896-97.
- H. H. West. M.A. Formerly of Trinity College, Cambridge. Admitted 1896-97.
- Miss C. A. Hutton. Girton College, Cambridge. Hon. Secretary of the Society for the Promotion of Hellenic Studies. Joint Editor of the *Annual*, 1906-26. Admitted 1896-97.

- J. G. C. Anderson. M.A. Camden Professor of Ancient History in the University of Oxford. Formerly Fellow of Lincoln College. Student, Tutor, and sometime Senior Censor of Christ Church, Oxford. Admitted (as Craven University Fellow) 1896—97.
- J. W. Crowfoot. M.A. Brasenose College, Oxford. Director of the British School of Archaeology in Jerusalem. Late Director of Education, Sudan Government. Admitted, on appointment to the Oxford Studentship, 1896—97. Re-admitted 1897—98.
- W. W. Reid. B.D. Universities of Aberdeen and Edinburgh. Minister of the Church of Scotland, Dumbarton, N.B. Admitted, as holder of Blackie Travelling Scholarship, 1896—97.
- A. E. Henderson. F.S.A., F.R.I.B.A. Owen Jones Student of Royal Institute of British Architects, 1897—98. Admitted 1897—98. Re-admitted 1898—99, 1901—2, and 1902—3.
- W. A. Curtis. D.Litt., D.D. (Edin.). Heriot Scholar of Edinburgh University. Regius Professor of Biblical Criticism and Biblical Antiquities in the University of Edinburgh. Formerly Professor of Systematic Theology in the University of Aberdeen. Admitted 1897—98.
- A. J. Spilsbury. M.A. Queen's College, Oxford. Head Master of Wakefield Grammar School. Formerly Senior Classical Master, City of London School. Admitted 1897—98, on appointment to the Oxford Studentship.
- E. B. Hoare. Magdalen College, Oxford. Admitted 1897—98, as Architectural Student.
- J. C. Lawson. M.A. Fellow, Tutor and Lecturer of Pembroke College, Cambridge. Admitted as Craven University Student, 1898—99. Re-admitted 1899—1900.
- C. D. Edmonds. M.A. Emmanuel College, Cambridge. Assistant Master at Berkhamstead School. Formerly at Aldenham School and at Royal Naval College, Osborne. Admitted as Prendergast Student, 1898—99.
- Sir John H. Marshall, Kt. C.I.E., Litt.D., F.S.A. Scholar of King's College, Cambridge. Director-General of the Archaeological Survey of India. Admitted 1898—99. Re-admitted as Prendergast Student, 1900—1, Craven Student, 1901—2.
- *Clement Gutch. M.A. King's College, Cambridge. Lecturer at St. John's College, Cambridge. Admitted, 1898—99, on appointment to the Cambridge Studentship.
- F. B. Welch. M.A. Magdalen College, Oxford. British Representative on the Commission mixte de l'Organisation des Populations Gréco-Bulgare. Formerly Vice-Consul, Athens. Admitted as Craven University Fellow, 1898—99. Re-admitted 1899—1900.
- T. D. Atkinson. F.R.I.B.A. Surveyor to the Dean and Chapter of Ely, to the Dean and Chapter of Winchester, and to the Warden and Fellows of Winchester College. Admitted as Architectural Student, 1898—99.
- J. K. Fotheringham. M.A., D.Litt. Merton and Magdalen Colleges, Oxford. Formerly Fellow of Magdalen College, Oxford. Reader in Ancient History in the University of London. Assistant in the University Observatory, Oxford. Admitted on appointment to Oxford Studentship, 1898—99.

- Canon J. H. Hopkinson. M.A. University College, Oxford. Organiser of Religious Education in the Diocese of Carlisle. Formerly Warden of Hulme Hall and Lecturer in Classical Archaeology, University of Manchester. Admitted as Craven University Fellow, 1899-1900 and 1900-1.
- *Miss O. C. Köhler (Mrs. Charles Smith). Girton College, Cambridge. Admitted 1899-1900.
- D. Theodore Fyfe. F.R.I.B.A. Surveyor to the Dean and Chapter of Chester. Master of the School of Architecture, Cambridge. Architectural Association Travelling Student, 1899. Admitted 1899-1900, on appointment to Architectural Studentship.
- †K. T. Frost. M.A., F.R.G.S. Brasenose College, Oxford. Lecturer at the Queen's University, Belfast. Admitted on appointment to the Oxford Studentship, 1900-1.
- R. D. Wells. M.A., F.R.I.B.A. Trinity College, Cambridge. Admitted on appointment to the Architectural Studentship, 1900-1.
- John Penoyre. M.A., C.B.E. Keble College, Oxford. Secretary and Librarian to the Society for the Promotion of Hellenic Studies. Secretary to the British School at Athens, 1905-1919. Admitted 1900-1. Re-admitted 1906-7, 1907-8.
- Marcus N. Tod. M.A., O.B.E. Fellow of Oriel College, Oxford, and University Reader in Greek Epigraphy. Craven University Fellow. Assistant-Director of the School 1902-4. Admitted on appointment to "Senior Studentship," 1901-2.
- *F. W. Hasluck. M.A. Sometime Fellow of King's College, Cambridge. Assistant Director and Librarian of the School from 1906-1915. Admitted on appointment to Cambridge Studentship 1901-2. Re-admitted 1902-3, 1904-5, 1905-6. Honorary Student of the School.
- C. Heaton Comyn. F.R.I.B.A., M.R.San.I. Admitted on appointment to the Architectural Studentship, 1901-2. Re-admitted 1903-4.
- Miss H. L. Lorimer. Girton College, Cambridge. Classical Tutor of Somerville College, Oxford. Admitted as Pfeiffer Travelling Student, 1901-2. Re-admitted 1910-11, 1921-22.
- Baroness E. Rosenörn-Lehn. Royal Holloway College, and University College, London. Admitted 1901-2.
- A. P. Oppé. B.A. New College, Oxford. Examiner in the Board of Education. Sometime Lecturer in Greek at St. Andrews University. Lecturer in Ancient History at Edinburgh University. Deputy Director and Secretary Victoria and Albert Museum. Admitted 1901-2.
- W. L. H. Duckworth. M.D., Sc.D. Fellow of Jesus College, Cambridge. University Lecturer in Physical Anthropology. Admitted 1902-3.
- C. T. Currelly. M.A., F.R.G.S., F.R.S.C. Victoria College, Toronto. Director of the Royal Ontario Museum. Formerly Assistant to Professor Flinders Petrie, under the Egypt Exploration Fund. Admitted 1902-3. Re-admitted 1903-4.
- R. McG. Dawkins. M.A. Hon. Fellow of Emmanuel College, Cambridge. Bywater Professor of Byzantine and Modern Greek Language and Literature in the University of Oxford. Director of the School from 1906-14. School Student. Admitted as Craven Student, 1902-3. Re-admitted 1903-4, 1904-5, 1905-6.

* Deceased.

† Killed in action, September 4th, 1914.

- E. S. Forster.
M.A., F.S.A., M.B.E. Bishop Frazer's Scholar, Oriel College, Oxford. Professor of Greek in the University of Sheffield. Formerly Assistant Lecturer in the University College of N. Wales. Admitted on appointment to the Oxford Studentship, 1902—3. Re-admitted 1903—4, with grants from the Craven Fund and Oriel College.
- A. J. B. Wace. M.A. Formerly Fellow of Pembroke College, Cambridge. Deputy Keeper in the Victoria and Albert Museum. Sometime Lecturer in Ancient History and Archaeology in the University of St. Andrews. Norton Lecturer of the American Archaeological Institute, 1923—24. Prendergast Student. Craven Student. Admitted 1902—3. Re-admitted 1903—4, 1904—12. Director of the School, 1914—23. Honorary Student of the School.
- †E. W. Webster. M.A. Fellow of Wadham College, Oxford. Taylorian Scholar in German, 1901. John Locke Scholar in Mental Philosophy 1904. Admitted 1902—3.
- J. B. Fulton. A.R.I.B.A. Soane Student. Admitted 1902—3.
- E. F. Reynolds. Admitted 1902—3.
- M. Cary. M.A.
(M. O. B. Caspari.) Late Scholar of Corpus Christi College, Oxford. Reader in Ancient History in the University of London. University Scholar in German. Admitted 1903—4.
- J. L. Stokes. B.A. Formerly Scholar of Pembroke College, Cambridge. Librarian of Charterhouse School since 1905. Admitted (as Holder of the Prior Scholarship from Pembroke College), 1903—4.
- Miss M. K. Welsh
(Mrs. A. M. Daniel.) Newnham College, Cambridge. Holder of the Marion Kennedy Studentship. Admitted 1903—4.
- †G. Dickens. M.A. Fellow of St. John's College, Oxford. Craven University Fellow. Admitted 1904—5, 1905—6. Re-admitted as School Student, 1906—7. Re-admitted 1907—8, 1908—9, 1912—13.
- C. C. T. Doll. M.A. Trinity College, Cambridge. Superintending Architect at the excavations at Knossos 1905—12. Admitted 1904—5.
- C. H. Hawes. M.A. Trinity College, Cambridge. Assistant Director, Boston Museum of Fine Arts. Late Professor of Anthropology, Dartmouth College, U.S.A. Admitted 1904—5, 1908—9.
- W. A. Kirkwood.
M.A. (Harvard),
Ph.D. (Harvard). University College, Toronto. Registrar of Trinity College, Toronto. Admitted 1904—5.
- H. J. W. Tillyard. M.A.,
D.Litt. (Edinburgh). Caius College, Cambridge. Professor of Greek at University College, Cardiff. Late Reader in Russian, University of Birmingham. Formerly Lecturer in Greek, University of Edinburgh. Admitted 1904—5 as Assistant Librarian. Re-admitted 1905—6 (on appointment to Studentship), 1906—7, 1908—9. Re-admitted 1912—13.
- Miss G. M. A. Richter.
Litt.D. Girton College, Cambridge. Associate Curator in Department of Classical Antiquities, Metropolitan Museum of Art, New York. Admitted 1904—5.

† Killed in action, April 9th, 1917.

† Died of wounds, July 17th, 1916.

- J. P. Droop. M.A. Trinity College, Cambridge. Professor of Classical Archaeology in the University of Liverpool. Late Assistant to Dr. Stein in the arrangement of his collections. Admitted 1905-6, 1906-7 (Pendergast Student), 1907-8 (School Student), 1908-9, 1910-11, 1912-13, 1913-14. Re-admitted 1921-22.
- Miss M. Hamilton. M.A., D.Litt. (Mrs. L. Caskey). University of St. Andrews. Holder of a Research Fellowship under the Carnegie Trust. Admitted 1905-6, 1906-7.
- A. C. B. Brown. M.A. Scholar of New College, Oxford. Fereday Fellow of St. John's College, Oxford. Formerly Assistant Lecturer in Classics, Manchester University. Assistant Master at Marlborough College. Admitted 1905-6.
- F. Orr. Admitted 1905-6.
- R. Traquair. F.R.I.B.A. Admitted 1905-6 (on appointment to an Architectural Studentship). Professor of Architecture, McGill University, Montreal. Re-admitted 1906-7, as Student of the Byzantine Fund.
- Miss E. B. Abrahams. M.A. (Mrs. Culley). Bedford College, London. Joint Editor of the *Annual*. Admitted 1905-6.
- W. J. Farrell. M.A., M.C. Late Fellow of Jesus College, Cambridge. Education Officer under Palestine Administration. Admitted 1906-7, 1907-8, 1908-9, 1909-10.
- Walter S. George. Travelling Student in Architecture of the Royal College of Art. Soane Medallist of Royal Institute of British Architects. Late Assistant to Architects of Imperial Delhi. Admitted 1906-7. Re-admitted 1908-9, 1909-10, as student of the Byzantine Research Fund. Re-admitted 1912-13.
- T. E. Peet. M.A. Queen's College, Oxford. Officer of Egypt Exploration Society and Professor of Egyptology in the University of Liverpool. Admitted as Craven Fellow, 1906-7, and as Pelham Student in the British School at Rome 1908-9.
- A. M. Woodward. M.A. Late Classical Demy of Magdalen College, Oxford. Director of the School. Formerly Lecturer in Ancient History at the University of Leeds. Assistant Director, 1909-10, 1922-23. Admitted 1906-7, 1907-8, 1908-9.
- W. M. Calder. B.A. Christ Church, Oxford. Professor of Greek in Victoria University, Manchester. Formerly Wilson Travelling Fellow, Aberdeen University. Research Student, Brasenose College, Oxford. Admitted 1907-8.
- W. Harvey. Gold Medallist and Travelling Student of the Royal Academy. Admitted 1907-8.
- H. Pirie-Gordon. M.A., D.S.C. Magdalen College, Oxford. Admitted 1907-8.
- M. S. Thompson. M.A., O.B.E. Corpus Christi College, Oxford. Holder of Chas. Oldham Scholarship. Craven Fellow. Admitted 1907-8, 1908-9, 1909-10, 1910-11, 1911-12. Hon. Secretary of the School, 1919-27.
- A. C. Sheepshanks. B.A. Trinity College, Cambridge. Assistant Master at Eton. Admitted 1907-8.
- N. Whatley. M.A. Late Fellow of Hertford College, Oxford. Headmaster of Clifton College. Admitted 1907-8.
- † G. L. Cheesman. M.A. Fellow and Lecturer of New College, Oxford. Admitted 1908-9.

† Killed in action, August 10th, 1915.

- A. W. Gomme. B.A. Trinity College, Cambridge. Lecturer in Greek History and Archaeology, University of Glasgow. Previously Assistant Lecturer in Classics, Liverpool University. Prendergast Student. Admitted 1908—9, 1919—20, 1922—23.
- L. B. Budden. Professor in the School of Architecture of the University of Liverpool. Admitted 1909—10.
M.A., A.R.I.B.A.
- S. W. Grose. M.A. Christ's College, Cambridge. Fellow and Tutor of Christ's College, Cambridge. From 1914, cataloguing McClean Collection of Greek Coins in the Fitzwilliam Museum. School Student. Admitted 1909—10.
- H. A. Ormerod. Queen's College, Oxford. Rathbone Professor of Ancient History in the University of Liverpool. Late Professor of Classics in the University of Leeds. Admitted
M.A., M.C. 1909—10, 1910—11.
- H. H. Jewell. Royal Academy Gold Medallist. Admitted 1909—10.
- W. R. Halliday. New College, Oxford. Principal of King's College, University of London. Late Rathbone Professor of Ancient History in the University of Liverpool. Craven Fellow. Admitted 1910—11. Re-admitted 1912—13.
B.A., B.Litt.
- Miss D. Lamb. M.B.E. Newnham College, Cambridge. Admitted 1910—11.
(Mrs. J. R. Brooke.) Re-admitted 1913—14.
- Miss L. E. Tennant Admitted 1910—11.
(Mrs. F. J. Watson Taylor).
- E. S. G. Robinson. M.A. Christ Church, Oxford. Assistant in the Coin and Medal Department, British Museum. School Student. Admitted 1910—11.
- L. B. Tillard. B.A. St. John's College, Cambridge. Admitted 1910—11.
- A. J. Toynbee. B.A. Sometime Fellow of Balliol College, Oxford. Late Koræes Professor of Byzantine and Modern Greek Language, Literature and History at King's College, University of London. Admitted 1911—12. Re-admitted 1920—21.
- R. S. Darbishire. B.A. Balliol College, Oxford. Admitted 1911—12.
- Miss M. M. Hardie. Newnham College, Cambridge. Admitted as School Student, 1911—12.
M.A. (Mrs. F. W. Hasluck).
- E. M. W. Tillyard. Late Fellow of Jesus College, Cambridge. Admitted
M.A., O.B.E. 1911—12.
- M. L. W. Laistner. Jesus College, Cambridge. Professor of Greek in the University of Philadelphia, Pa. Late Reader in Ancient History in the University of London. Craven Student. Admitted 1912—13. Re-admitted 1913—14 as School Student.
- S. Casson. M.A. Lincoln College, Oxford, and Senior Scholar of St. John's College. Fellow of New College. University Lecturer in Classical Archaeology. Assistant Director of the School, 1919—1922. School Student. Admitted 1912—13. Re-admitted 1913—14.
- R. S. Lambert. Repton School. In charge of the Adult Education Section of The British Broadcasting Corporation.

Gordon Leith.	Holder of Herbert Baker Studentship. Admitted 1912-13.
C. A. Scutt. M.A.	Clare College, Cambridge. Professor of Greek in the University of Melbourne, Victoria. Prendergast Student of the University of Cambridge. Admitted 1912-13. Re-admitted 1913-14.
† R. M. Heath. B.A.	Oriel College, Oxford. Craven Fellow. Admitted 1913-14.
J. Boxwell. B.A.	Scholar of Trinity College, Dublin. Travelling Scholar of Union of South Africa. Admitted 1913-14.
Miss M. N. L. Taylor (Mrs. H. C. Bradshaw).	Newnham College, Cambridge. Admitted 1913-14.
J. Arnott Hamilton. M.A.	University of Edinburgh. Holder of the Blackie Travelling Scholarship. Admitted 1913-14.
Miss E. Radford.	Admitted 1913-14.
Miss Agnes Conway. M.B.E.	Admitted 1913-14.
Rev. W. A. Wigram. D.D.	Admitted 1913-14. Chaplain to British Legation, Athens, 1923-26.
† C. B. Moss-Blundell. B.A.	New College, Oxford. School Student elect 1914-15.
H. Collingham. B.A.	Queen's College, Cambridge. Assistant Master at St. Olave's, Southwark. Craven Student. Admitted 1919-20.
M. Tiefney. B.A.	University of Ireland. Professor of Antient History, University College, Dublin. Admitted 1919-20.
A. W. Lawrence. B.A.	New College, Oxford. Admitted with grant from the Craven Fund, 1919-20. Re-admitted 1921-22. Re-admitted as Craven Fellow, 1924-25.
* J. B. Hutton. M.A.	Lecturer in Greek History and Archaeology at University of Glasgow. Admitted with grant from the Carnegie Trustees, 1920-21.
F. L. Lucas. B.A.	Trinity College, Cambridge. Fellow and Lecturer of King's College. School Student. Admitted 1920-21.
B. Ashmole. M.A., M.C.	Hertford College, Oxford. Late Director of the British School at Rome. Yates Professor elect in the University of London. Craven Fellow. Admitted 1920-21, 1921-22.
H. T. Wade Gery. M.A.	New College, Oxford. Fellow and Tutor of Wadham College. Admitted 1920-21, 1921-22, 1922-23.
J. J. E. Hondius. Litt.Class.Doc.	University of Utrecht, Holland. Admitted as Foreign Student 1920-21.
C. A. Boethius. Dr.Phil.	University of Upsala, Sweden. Director of Swedish Arch. Inst., Rome. Admitted as Foreign Student 1920-21, 1921-22.
Miss L. Chandler. B.A.	University of Sheffield. Classical Mistress at the Hornsey High School. First Holder of Gustav Sachs Memorial Studentship. Admitted 1920-21.
Miss M. A. B. Herford. M.A. (Mrs. G. E. K. Braunholtz).	University of Manchester and Somerville College, Oxford. Formerly Lecturer in Classical Archaeology and Assistant Lecturer in Classics, University of Manchester. Admitted 1920-21.

† Killed in action, September 16th, 1916.

† Killed in action, September 26th, 1915.

* Deceased.

- Miss W. Lamb. Newnham College, Cambridge. Hon. Keeper of the Greek and Roman Department, Fitzwilliam Museum. Admitted 1920—21. Re-admitted 1921—22, 1922—23, 1923—24, 1924—25, 1927—28.
- M. A. Hondius-Van Haeften (Mrs. J. J. E. Hondius). University of Utrecht, Holland. Admitted as Foreign Student, 1920—21.
- W. A. Heurtley. B.A., O.B.E. Caius College, Cambridge. Diploma of Archaeology, Oxford. Assistant Director and Librarian of the School. School Student. Admitted 1921—22, 1922—23.
- R. W. Hutchinson. B.A. St. John's College, Cambridge. Craven Student. Admitted 1921—22.
- J. E. Scott. M.A. Emmanuel College, Cambridge. Fellow and Lecturer of Caius College, Cambridge. Admitted 1921—22.
- E. Smith. Ph.D. University of Christiania, Norway. Lecturer in Classics. Admitted as Foreign Student, 1921—22.
- *A. Smith (Mrs. E. Smith). University of Christiania, Norway. Admitted as Foreign Student, 1921—22.
- E. Kjellberg. Ph.D. University of Lund, Sweden. Assistant in the National Museum, Stockholm. Admitted as Foreign Student, 1921—22.
- J. Waldis. Dr.Phil. University of Zurich, Switzerland. Professor at the Gymnasium, Lucerne. Admitted as Foreign Student, 1921—22.
- G. Snijder. Ph.D. University of Utrecht, Holland. Admitted as Foreign Student with Travelling Fellowship from his University, 1921—22.
- J. Bell. M.A. Fellow of Queen's College, Oxford. Admitted 1922—23.
- *S. S. Clarke. B.A. Balliol College, Oxford. Fellow of Exeter College. Craven Fellow. Admitted 1922—23, 1923—24.
- B. L. Hallward. B.A. King's College, Cambridge. Fellow of Peterhouse. Admitted 1922—23 as School Student.
- D. C. Macgregor. M.A. Fellow of Balliol College, Oxford. Admitted 1922—23.
- Miss J. Pybus (Mrs. A. M. Woodward). Newnham College, Cambridge. Late Senior Classical Mistress, Newcastle Central High School. Admitted 1922—23.
- A. G. Russell. B.A. University of Liverpool. Classical Master at the Liverpool Institute. Admitted as Sachs Student, 1922—23.
- C. T. Seltman. B.A. Queens' College, Cambridge. Diploma of Archaeology, Cambridge. University Lecturer in Classics, Cambridge. Secretary of Cambridge Philological Society. Late George Charles Winter Warr Scholar. Prendergast Student. Admitted 1922—23.
- O. J. Todd. Ph.D. (Harv.). Associate Professor of Classics in the University of British Columbia. Admitted 1922—23.
- Miss J. Webb. B.A. University of Melbourne. Admitted 1922—23.
- W. H. Alexander. M.A. (Tor.), Ph.D. (Calif.). Professor of Classics in the University of Alberta, Canada. Admitted 1923—24. Re-admitted 1925—26.

- Miss C. Brönsted. University of Copenhagen. Admitted as Foreign Student 1923-24.
- W. B. C. Buchanan. B.A. University of Edinburgh. Admitted as holder of Blackie Travelling Scholarship, 1923-24.
- C. W. M. Cox. B.A. Balliol College, Oxford. Fellow of New College, Oxford. Admitted as Craven Fellow, 1923-24.
- W. L. Cuttle. B.A. Emmanuel College, Cambridge. Assistant Lecturer in Classics in the University of Bristol. Admitted as Craven Student, 1923-1924. Re-admitted 1924-25 as School Student. Re-admitted 1925-26.
- C. Hignett. M.A. Fellow of Hertford College, Oxford. Admitted 1923-24.
- Miss M. B. Hobling. B.A. Somerville College, Oxford. Classical Mistress at the Perse Girls' School, Cambridge. Admitted as School Student, 1923-24. Re-admitted 1924-25 as holder of the Mary Ewart Scholarship.
- Miss U. D. Hunt. M.A. Bedford College, London. Classical Mistress, Tiffin Girls' School, Kingston-on-Thames. Formerly Lecturer at Bedford College for Women. Admitted 1923-24.
- H. H. Keen. B.A. Balliol College, Oxford. Admitted 1923-24.
- M. B. C. Tait. B.A. Balliol College, Oxford. Admitted 1923-24.
- Miss E. Tankard. B.A. University of Liverpool. Assistant-Secretary to Institute of Archaeology, Liverpool. Admitted with grants from Holt Educational Trust and the School, 1923-24. Re-admitted 1924-25, 1925-26.
- Miss A. Wentzel. University of Copenhagen. Admitted as Foreign Student. 1923-24.
- R. P. Austin. B.A. University College, Reading. Assistant Lecturer in Classics, University of Birmingham. Admitted 1924-25 with grants from University College, Reading and the Cornwall County Education Committee. Re-admitted as holder of a Postgraduate Travelling Studentship from University of London, 1925-26. Re-admitted 1927-28.
- H. G. G. Payne. B.A. Christ Church, Oxford. Assistant Curator of Coins, Ashmolean Museum. Admitted as holder of Travelling Scholarship in Mediterranean Archaeology, 1924-25, 1925-26. Re-admitted 1926-27.
- A. M. Farrer. Balliol College, Oxford. Admitted as holder of the Clarke Memorial Exhibition, Easter, 1925.
- J. H. Iliffe. B.A. Emmanuel College, Cambridge. Lecturer at Toronto University. Late Assistant Lecturer in Classics in the University College of N. Wales, Bangor. Admitted as Craven Student, 1924-25.
- W. A. Sisson. Admitted as Jarvis Student in Architecture at the British School at Rome, 1924-25. Re-admitted 1925-26.
- B. I. Lawrence. B.A. Somerville College, Oxford. Admitted 1924-25.
(Mrs. A. W. Lawrence.)
- Miss V. Whitfield. B.A. Somerville College, Oxford. Admitted as holder of a Gilchrist Scholarship, 1924-25. Re-admitted as holder of the Bryce Studentship, a Fellowship from Lady Margaret Hall, and a grant from the Ireland Fund, 1927-28.
(Mrs. H. T. Wade-Gery.)

H. Frankfort. Hist. Doct. (Leiden), M.A. (London).	Universities of Amsterdam and London. Director of Excavations, Egypt Exploration Society. Admitted 1924—25.
H. A. Frankfort. Lit. n. Cand. (Mrs. H. Frankfort.)	University of Amsterdam. Assistant to Expedition of Egypt Exploration Fund. Admitted 1924—25.
P. Dikaïos.	Admitted on Nomination of the Government of Cyprus, 1924—25.
H. Box. B.A.	St. John's College, Oxford. Additional Lecturer in Greek, the University of St. Andrews, N.B. Admitted as School Student, 1925—26.
G. A. D. Tait. B.A.	St. John's College, Cambridge. Assistant Master at Eton College. Admitted with a Scholarship from his College, 1925—26.
O. Davies. B.A.	Exeter College, Oxford. Admitted as holder of the Clarke Memorial Exhibition, Easter, 1926. Re- admitted as Craven Fellow, 1927—28.
Miss E. Scott.	Oxford Home Student. Admitted 1925—26.
Miss J. Toynbee. B.A.	Newnham College, Cambridge. Admitted as Student of the British School at Rome, 1926.
R. A. Cordingley.	Admitted as Student in Architecture of the British School at Rome, 1925—26.
Miss K. M. T. Chrimes. B.A.	St. Hugh's Hall, Oxford. Admitted as Gilchrist Student of the British School at Rome, 1925—26.
Miss N. M. Holley.	Newnham College, Cambridge. Admitted as Student of the British School at Rome, 1925—26.
C. G. Hardie.	Balliol College, Oxford. Admitted as holder of the Clarke Memorial Exhibition, Easter, 1927.
J. T. Hawdon. B.A.	University of Birmingham. Admitted as Sachs Student, 1926—27.
*Miss A. Masom. B.A.	University of London. Admitted 1926—27.
P. J. Dixon. B.A.	Pembroke College, Cambridge. Admitted as Craven Student 1927—28.
A. L. McMullen. B.A.	St. John's College, Cambridge. Admitted 1927—28.
J. D. S. Pendlebury. B.A.	Pembroke College, Cambridge. Admitted as School Student 1927—28.
C. A. Raleigh Radford. B.A.	Exeter College, Oxford. Admitted 1927—28.
W. D. Woodhead M.A. (Oxon).	Professor of Greek, McGill University, Montreal. Ad- mitted 1927—28.
Miss S. Benton. M.A.	Girton College, Cambridge. Admitted 1927—28.
Miss M. Rodger. B.A.	Somerville College, Oxford. Admitted as School Student 1927—28.
Miss H. White (Mrs. J. D. S. Pendlebury).	Newnham College, Cambridge. Admitted 1927—28.
I. Gallie.	Exeter College, Oxford. Admitted as holder of the Clarke Memorial Studentship, 1928.

* Deceased.

W. G. Hardy. M.A.	Associate Professor of Classics, University of Alberta. Admitted 1928.
Mrs. Hardy.	Admitted 1928.
H. W. Jacobs. B.A.	Wadham College, Oxford. Admitted as a Student of the School at Rome, 1928.
Miss M. I. Turnbull.	Dunedin University, New Zealand. Admitted 1928.

ASSOCIATES OF THE SCHOOL.

*Rev. A. H. Cruikshank.	Elected 1896.
Ambrose Poynter, Esq.	„ 1896.
J. E. Brooks, Esq.	„ 1896.
Miss Louisa Pesel.	„ 1902.
J. F. Crace, Esq.	„ 1902.
Miss Mona Wilson.	„ 1903.
J. S. Carter, Esq.	„ 1903.
B. Townsend, Esq.	„ 1903.
A. M. Daniel, Esq.	„ 1903.
H. W. Allen, Esq.	„ 1906.
W. Miller, Esq.	„ 1906.
George Kennedy, Esq.	„ 1906.
A. E. Zimmern, Esq.	„ 1910.
Miss Negreponte.	„ 1912.
C. J. Ellingham, Esq.	„ 1913.
Capt. H. M. Greaves, R.A.	„ 1913.
Shirley Atchley, A.P.	„ 1920.
Miss C. A. Hutton	„ 1926.
Rev. W. A. Wigram	„ 1926.

RULES AND REGULATIONS OF THE BRITISH SCHOOL AT ATHENS.

OBJECTS OF THE SCHOOL.

I. The first aim of the School shall be to promote the study of Greek archaeology in all its departments. Among these shall be (i) the study of Greek art and architecture in their remains of every period; (ii) the study of inscriptions; (iii) the exploration of ancient sites; (iv) the tracing of ancient roads and routes of traffic.

II. Besides being a School of Archaeology, it shall be also, in the most comprehensive sense, a School of Classical Studies. Every period of the Greek language and literature, from the earliest age to the present day, shall be considered as coming within the province of the School.

III. The School shall also be a centre at which information can be obtained and books consulted by British travellers in Greece.

IV. For these purposes a Library shall be formed, and maintained, of archaeological and other suitable books, including maps, plans, and photographs.

THE SUBSCRIBERS.

V. The following shall be considered as Subscribers to the School :—

- (1) Donors, other than Corporate Bodies, of £10 and upwards.
- (2) Annual Subscribers of £1 and upwards during the period of their subscription.

VI. Subscribers of £2 annually or more, and Donors of £20 and upwards to the general funds of the School, shall receive a copy of the *Annual* free of charge.

Subscribers of £1 annually and Donors of £10 to the general funds shall be allowed to purchase the *Annual* at a reduced rate of £1. All Subscribers shall be entitled to receive a copy of the Annual Report and to use the Library and attend the public meetings of the School in Athens.

VII. A Corporate Body subscribing not less than £50 a year, for a term of years, shall, during that term, have the right to nominate a member of the Managing Committee.

VIII. A meeting of Subscribers shall be held in October of each year, at which each Subscriber shall have one vote. A subscribing Corporate Body may send a representative. At this meeting a report from the Managing Committee shall be presented, including a financial statement and selections from the reports of the Director and Students for the season. At this meeting shall also be annually elected or re-elected the Treasurer and the Secretary of the School, two Auditors, and four members of the Managing Committee, in place of those retiring under Rule XIII. (3).

IX. Special meetings of Subscribers may, if necessary, be summoned by the Managing Committee.

THE TRUSTEES.

X. The property of the School shall be vested in three Trustees, who shall be appointed for life, except as hereinafter provided. Vacancies in the number of Trustees shall be filled up at the annual meeting of the Subscribers.

XI. In the event of a Trustee becoming unfit or incapable of acting, he may be removed from his office by a majority of three-fourths of those present at a special meeting of Subscribers summoned by the Managing Committee for that purpose, and another Trustee shall by the same majority be appointed in his place.

XII. In the event of the death or resignation of a Trustee occurring between two annual meetings, the Managing Committee shall have the power of nominating another Trustee to act in his place until the next annual meeting.

THE MANAGING COMMITTEE.

XIII. The Managing Committee shall consist of the following :—

- (1) The Trustees of the School.
- (2) The Treasurer and Secretary of the School.
- (3) Twelve Members elected by the Subscribers at the annual meetings. Of these, four shall retire in each year, at first by lot, afterwards by rotation. Members retiring are eligible for re-election.
- (4) The members nominated by Corporate Bodies under Rule VII.

XIV. The Committee shall have control of all the affairs of the School, and shall decide any dispute that may arise between the Director and Students. They shall have power to deprive any Student of the use of the school premises.

XV. The Committee shall meet as a rule once in every two months; but the Secretary may, with the approval of the Chairman and Treasurer, summon a special meeting when necessary.

XVI. Due notice of every meeting shall be sent to each member of the Committee by a summons signed by the Secretary. Three members of the Committee shall be a quorum.

XVII. In case of an equality of votes, the Chairman shall have a second or casting vote.

XVIII. In the event of vacancies occurring among the officers or on the Committee between the annual elections, they may be provisionally filled up by the Committee until the next annual meeting.

HONORARY STUDENTS, HONORARY ASSOCIATES, STUDENTS, AND ASSOCIATES.

XIX. The Students shall consist of the following :—

- (1) Holders of travelling fellowships, studentships, or scholarships at any University of the British Empire.
- (2) Travelling Students sent out by the Royal Academy, the Royal Institute of British Architects, the Byzantine Research and Publication Fund, or other similar bodies.
- (3) Other persons who shall satisfy the Managing Committee that they are duly qualified to be admitted to the privileges of the School.

XX. No person, other than a student of the British School at Rome, shall be admitted as a Student who does not intend to reside at least three months in Greek lands. In the case of Students of the British School at Rome, an aggregate residence of four months at the two Schools will be accepted as alternative to three months' residence in Greece.

XXI. Students attached to the School will be expected to pursue some definite course of study or research in a department of Hellenic studies, and to write in each season a report upon their work. Such reports shall be submitted to the Director, shall by him be forwarded to the Managing Committee, and may be published by the Committee if and as they think proper.

XXII. Intending Students are required to apply to the Secretary. They will be regarded as Students from the date of their admission by the Committee to the 31st day of October next following; but any Student admitted between July 1st and October 31st in any year shall continue to be regarded as a Student until October 31st of the following year.

XXIII. The Managing Committee may elect as Honorary Students or as Honorary Associates of the School such persons as they may from time to time deem worthy of that distinction. They may also elect as Associates of the School any persons actively engaged in study or exploration in Greek lands.

XXIV. Honorary Students, Honorary Associates, Students, and Associates shall have a right to use the Library of the School and to attend all lectures given in connexion with the School, free of charge.

XXV. Students shall be expected to reside in the Hostel provided for them, except with the sanction of the Managing Committee. Priority of claim to accommodation in the Hostel shall be determined by the Committee.

THE DIRECTOR.

XXVI. The Director shall be appointed by the Managing Committee, on terms which shall be agreed upon at the time, for a period of not more than three years. He shall be eligible for re-election.

XXVII. He shall have possession of the school-building as a dwelling-house.

XXVIII. It shall be his duty (1) to guide and assist the studies of Students and Associates of the School, affording them all the aid in his power, and also to see that reports are duly furnished by Students, in accordance with Rule XXI., and placed in the hands of the Secretary before the end of June; (2) to assist in editing the *School Annual*.

XXIX. Public Meetings of the School shall be held in Athens during the season, at which the Director and Students of the School shall read papers on some subject of study or research, and make reports on the work undertaken by the School.

XXX. He may at his discretion allow persons, not Students of the School, to use the Library and attend the public meetings and lectures of the School.

XXXI. He shall be resident at Athens from the beginning of November in each year to the end of the following June, but shall be at liberty to absent himself for short periods for purposes of exploration or research.

XXXII. At the end of each season he shall report to the Managing Committee—(i) on the studies pursued during the season by himself and by each Student; (ii) on the state of the School-premises and the repairs needed for them; (iii) on the state of the Library and the purchases of books, &c., which he may think desirable; and (iv) on any other matter affecting the interests of the School.

XXXIII. In case of misconduct the Director may be removed from his office by the Managing Committee by a majority of three-fourths of those present at a meeting specially summoned for the purpose. Of such meeting at least a fortnight's notice shall be given.

THE ASSISTANT DIRECTOR AND LIBRARIAN.

XXXIV. The Assistant Director shall be appointed by the Managing Committee, on terms which shall be agreed upon at the time, for a period of not more than three years. He shall be eligible for re-election.

XXXV. It shall be his duty to take charge of the Library and to be responsible for the Hostel, subject to the Director's approval and control, and otherwise help if required in the management of the School.

RULES FOR THE MACMILLAN HOSTEL.

XXXVI. The Director shall have power to exclude a Student from the Hostel in case of misconduct; but such exclusion must be immediately reported to the Managing Committee.

XXXVII. The Students shall pay an entrance fee of £2 2s. per session, and a fixed charge of 3s. a night or £1 a week for the small rooms in the Hostel. Two Students sharing a large room shall pay a reduced charge. These payments shall include fire, lighting, and the necessary servants' wages. Students shall also be required to pay the cost of their messing.

XXXVIII. Honorary Students, Honorary Associates, Associates, Members of the Committee, and ex-Directors may be admitted to residence in the Hostel. Other persons, if seriously engaged in study or research, may be admitted by the Director at his discretion. But no person shall reside in the Hostel under this rule to the exclusion of any Student desiring admission.

XXXIX. Residents other than Students or Associates shall pay an entrance fee of £2 2s. for any period up to three months, or £5 5s. per session, and a fixed charge of 6s. a night or £2 a week and the cost of messing. Associates shall be admitted to the Hostel at Student rates.

THE VILLA ARIADNE AT KNOSSOS.

XL. The Archaeological Curator at Knossos shall be appointed¹ by the Managing Committee for a period of not more than three years. He shall be eligible for re-election.

XLI. It shall be his duty (1) to reside generally at the Villa Ariadne from February 15th to August 15th; (2) to supervise the house and property generally and to see that the Palace and other excavated buildings are properly cared for.

XLII. He shall hold with regard to the Director of the School, the same position as the Assistant Director.

XLIII. Students residing at the Villa, and not engaged on an actual School excavation, shall pay the same charges as in the Hostel at Athens. With regard to the "Taverna," special arrangements will be made.

RULES FOR THE LIBRARY.

XLIV. The Director shall have power to make rules for the management of the Library, its use by Students, and the like; such rules to be subject to the approval of the Managing Committee.

PUBLICATION.

XLV. No publication whatever, respecting the work of the School, shall be made without the previous approval of the Committee.

THE FINANCES.

XLVI. All money received on behalf of the School beyond what is required for current expenses shall be invested in the names and at the discretion of the Trustees.

XLVII. The banking account of the School shall be placed in the names of the Treasurer and Secretary, who shall sign cheques jointly.

XLVIII. The first claim on the revenue of the School shall be the maintenance and repair of the School premises in Athens and the Villa Ariadne, and the payment of rates, taxes, and insurance.

XLIX. The second claim shall be the salaries of the Director and other officials of the School, as arranged between them and the Managing Committee.

Revised, 1928.

¹ Subject to the approval of Sir Arthur Evans.

MANAGING COMMITTEE, 1926—1927.

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ASSISTANT DIRECTOR AND LIBRARIAN:

W. A. HEURTLEY, Esq., B.A., O.B.E.

ARCHAEOLOGICAL CURATOR AT KNOSSOS:

DUNCAN MACKENZIE, Esq., M.A., PH.D.

ARCHITECT TO THE SCHOOL:

P. DE JONG, Esq.

BRITISH SCHOOL AT ATHENS

THE School was founded in 1886 to provide British Students of Greek literature, art, archaeology and history with the opportunity of pursuing their researches in Greece itself, with the command of the means which recent great advances of knowledge have rendered indispensable.

The School buildings at Athens are situated on the slopes of Lycabettus on ground presented by the Greek Government. They consist of a house for the Director, and the Macmillan hostel with accommodation for the Assistant Director and eight students. Adjoining the hostel is the Penrose library, so called after the first Director of the School, which contains over 9,000 volumes, classical texts, histories, works on art, archaeology and topography, a rich series of maps, and current archaeological periodicals. In the common room of the hostel is housed the Finlay library, which formerly belonged to George Finlay, the historian of Byzantine and Modern Greece. This collection includes many rare pamphlets, and MSS. dealing with the period of the Greek Revolution, and a collection of Byroniana.

Facilities are afforded for using the libraries and attending the lectures of the other foreign schools, and by the kindness of the Greek Archaeological Service permits are granted giving Students free access to the Museums.

In 1926 Sir Arthur Evans, with the consent of the Greek Government, presented to the Trustees of the School his properties in Crete, including the Villa Ariadne and the site of the Palace at Knossos. He further endowed his gift in order to provide for the proper upkeep of the Palace and for the appointment of an Archaeological Curator, who resides in the Villa Ariadne from February to August each year. He has also (1928) renovated the old 'Taverna' on the road below so as to provide one single and one double bedroom, a sitting-room, and work-room, kitchen, etc., below, for the use, at any time, of members of the School independently studying the antiquities of the spot.

A small library is being started in the Villa for the convenience of students working in Crete.

The School at Athens is open from November 1st until July 1st during which time either the Director or Assistant Director is in residence.

Any duly qualified British subject can be admitted as a member of the School, and students of the British School at Rome have the privilege of admission as a matter of course.

A Studentship, value £100, is offered each year to the Universities of Oxford and Cambridge alternately; about every three years the Gustav Sachs Memorial Studentship (value £100) is open to all Universities in the British Isles; and a Studentship (value £200), tenable for two years, recently founded by Mr. George Macmillan, will be open to duly qualified male candidates in the autumn of 1928.

Holders of travelling fellowships, Studentships or Scholarships at any University of the British Empire and Travelling Students sent out by the Royal Academy, the Royal Institute of British Architects, the Byzantine Research and Publication Fund, or other similar bodies, are also admitted as Students.

Students, except for an entrance fee of £2 2s. per session, are admitted free of charge, but are required to pay room rent and the cost of their messing. The cost of living from 1926-1928 was about 7s. 6d. per day.

All Students are normally required to pursue a definite course of study and to reside in Greek lands for at least three months. The Committee however is accustomed to modify these regulations especially in the case of Undergraduates, whose time is necessarily limited and in the case of Students of the School at Rome.

All applications for admission by intending Students should be made to the Secretary, W. R. Le Fanu, Esq., British School at Athens, 50, Bedford Square, London, W.C. 1.

An excavation is carried on each year by the Director with members of the School at some site of historical importance. The list of excavations made by the School includes Megalopolis, Sparta, Mycenae, sites in Cyprus, Thessaly, and Boeotia, Phylakopi in Melos and in Crete Palaikastro and the Dictaeon Cave. The results of these excavations, with reports of the other work of the School, are published in the Annual of the British School at Athens, which for many years past has ranked high among archaeological periodicals.

Apart from a Government subsidy, renewable every five years, the School is entirely dependent on donations and subscriptions from individuals and from learned Societies.

Individual Subscribers of £2 per annum or donors of £20 to the General Fund of the School receive a copy of the Annual free of charge; subscribers of £1 or donors of £10 are entitled to purchase a copy for an additional £1. (The published price being about £3 3s.)

Any subscriber when in Athens, is entitled to the full use of the Library.

Further donations and annual subscriptions are urgently required to meet the cost of upkeep, which has become much heavier in recent years, and should be sent to the Hon. Treasurer, V. W. Yorke, Esq., Farringdon Works, Shoe Lane, London, E.C. 4.

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SPARTA | EASTERN RETAINING-WALL OF THE THEATRE (1927).

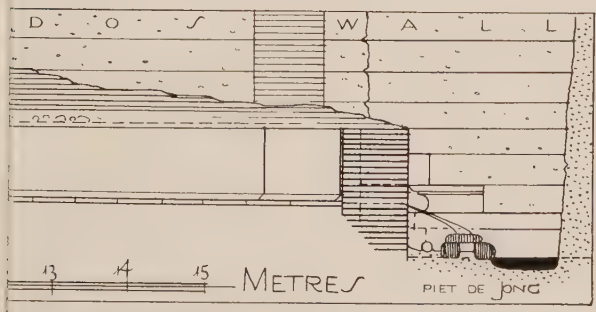
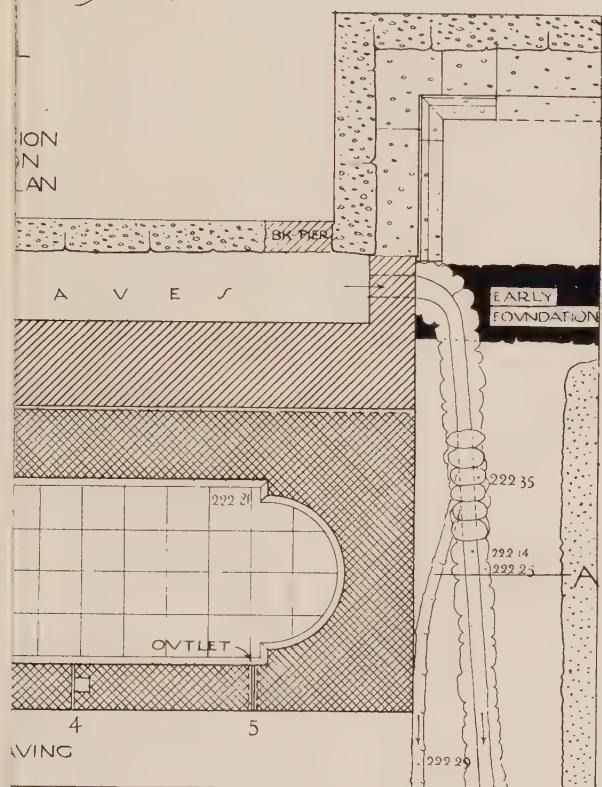


SPARTA: THE NYMPHAEUM, FROM THE WEST.



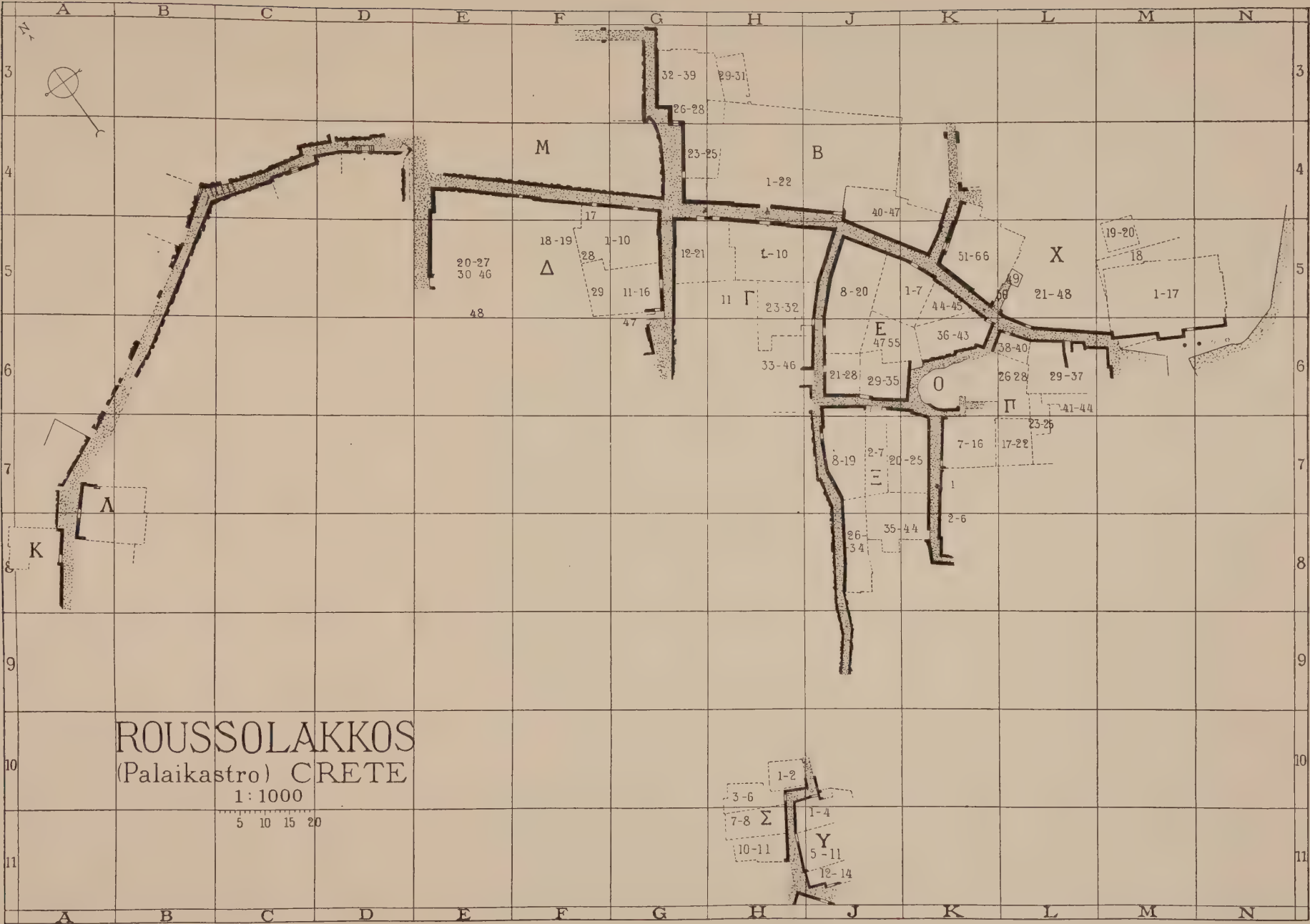
MAP SHOWING CONSTANTINOPLE IN THE SIXTEENTH CENTURY. (After Mordtmann's Reproduction.)

1927





PLAN OF THE PALACE AT PHAESTOS (after *Mon. Ant.* xiv. Tav. xxvii.),
WITH ADDITIONS SHOWING THE RESULT OF LATER EXCAVATIONS.

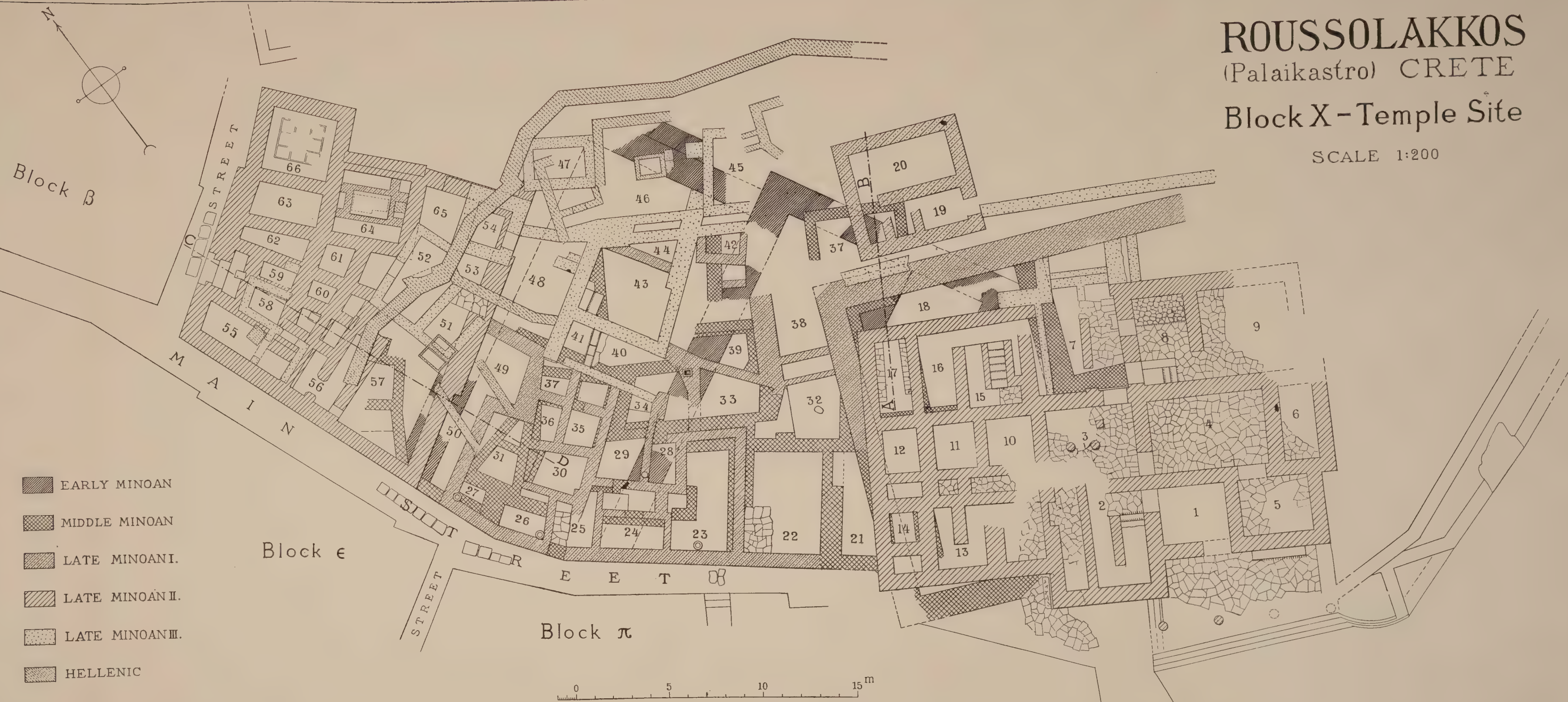


PALAIKASTRO. KEY PLAN OF THE TOWN.

ROUSSOLAKKOS
(Palaikastro) CRETE
Block X - Temple Site

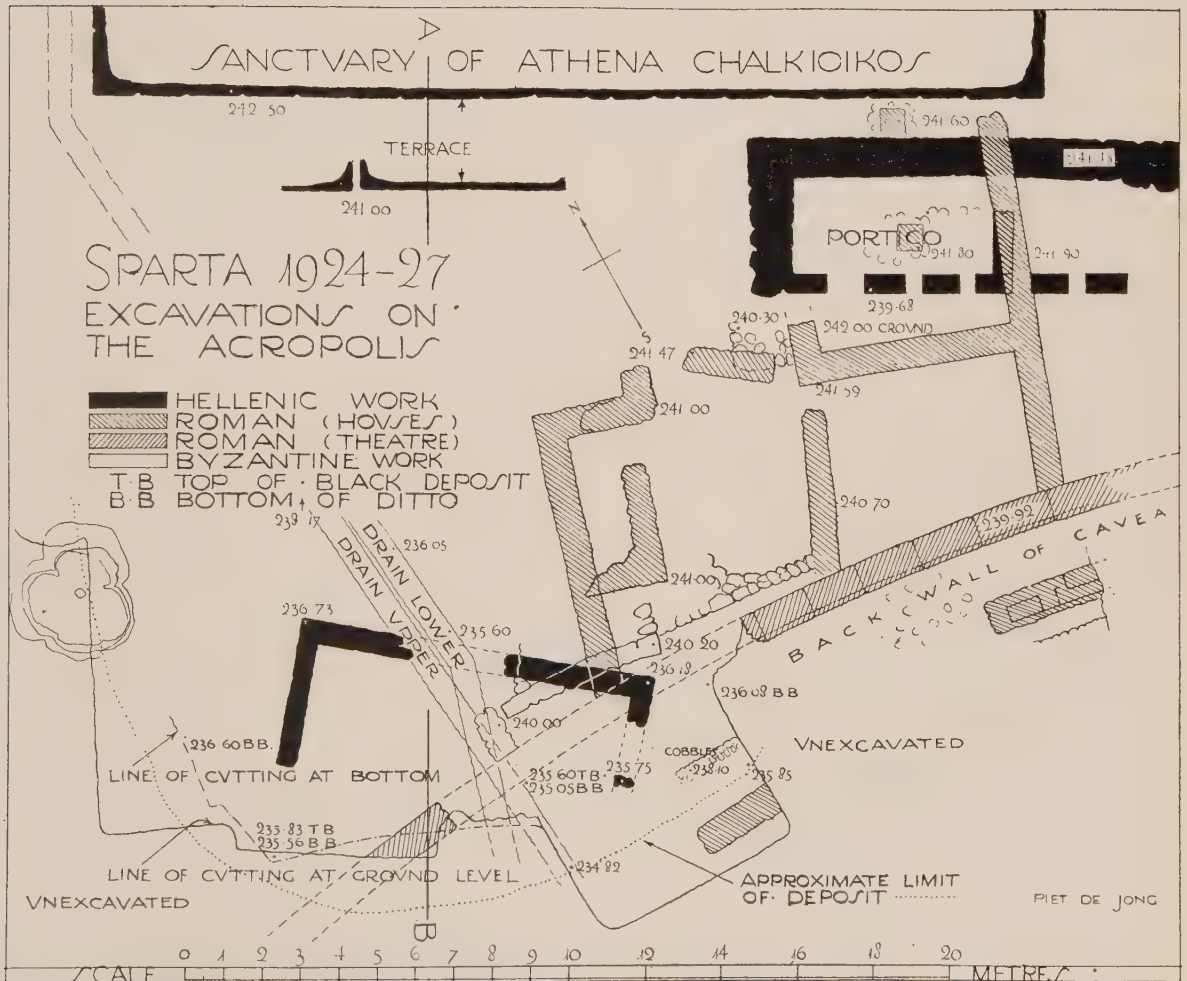
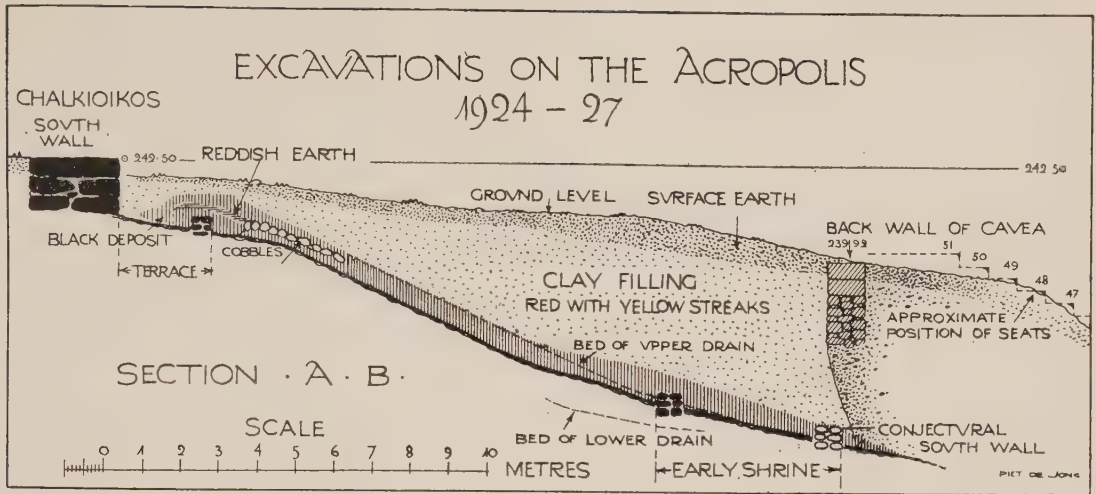
SCALE 1:200

- EARLY MINOAN
- MIDDLE MINOAN
- LATE MINOAN I.
- LATE MINOAN II.
- LATE MINOAN III.
- HELLENIC

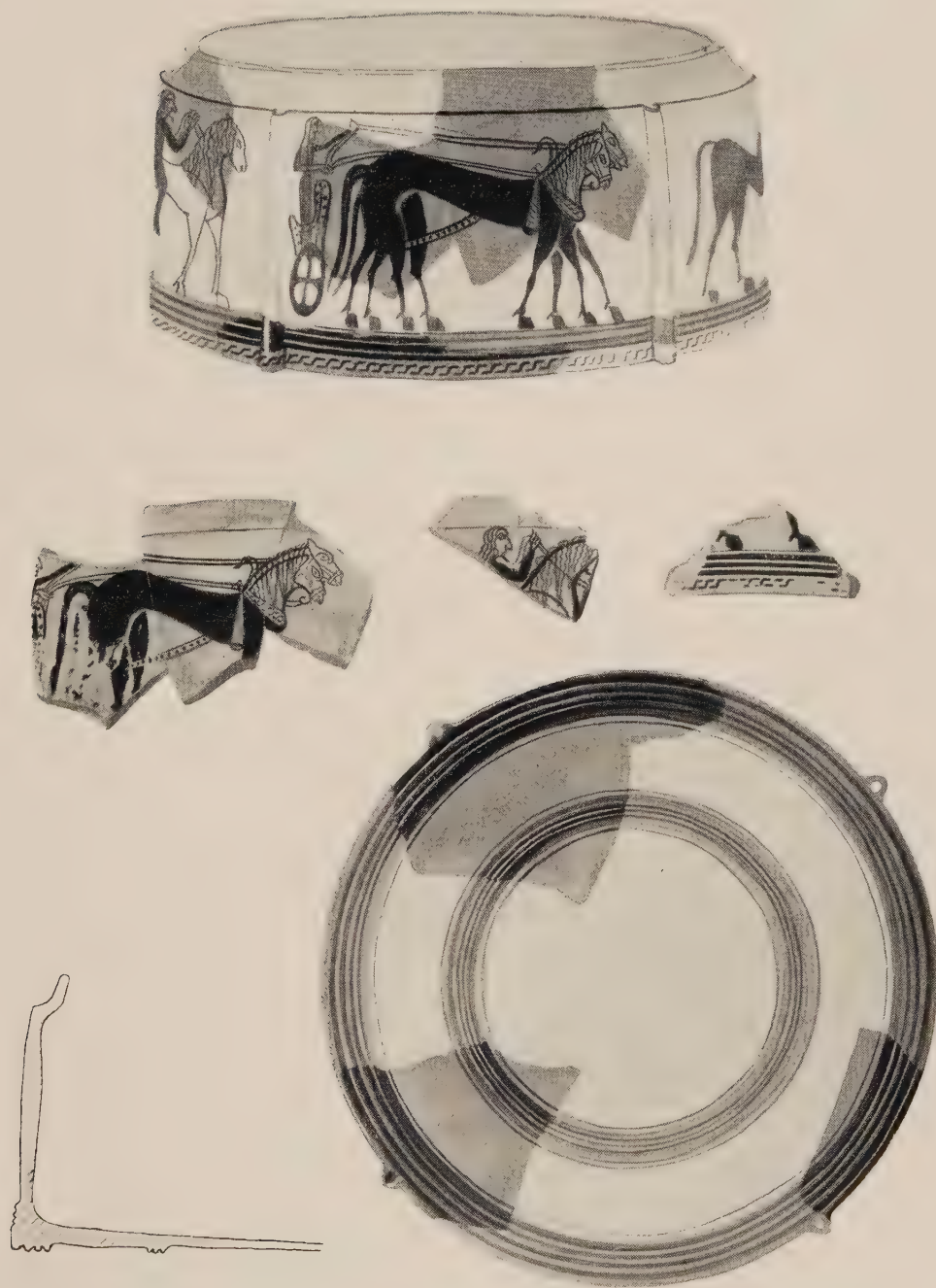




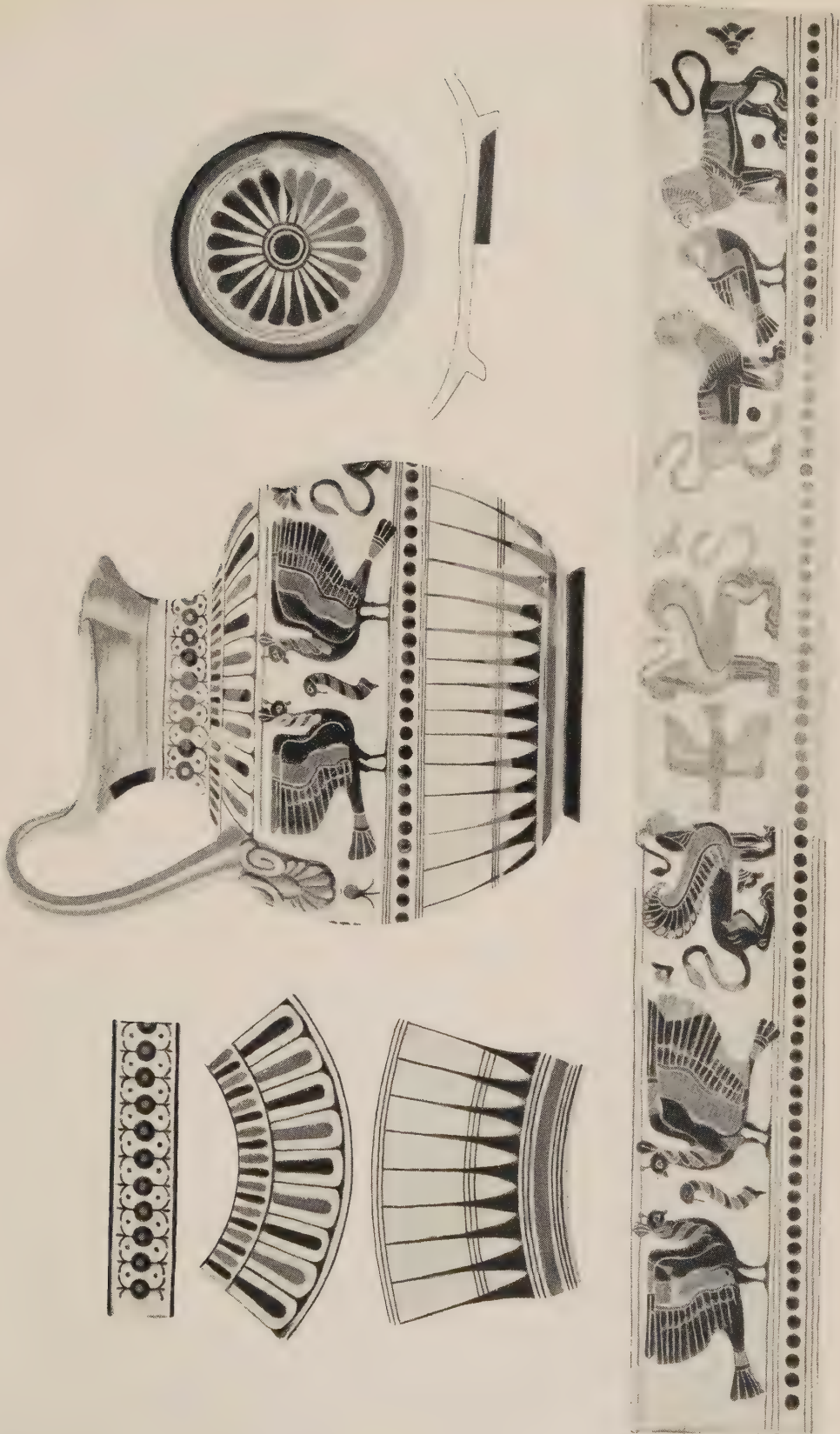
SPARTA - HERO-RELIEF FROM THE THEATRE. (Scale *ca.* 1 : 2).



EXCAVATIONS AT SPARTA: THE ACROPOLIS. SECTION AND PLAN.



SPARTA: EARLY SEVENTH-CENTURY PYXIS. (Scale 2 : 5).



SPARTA: OINOCHOE OF LACONIAN III. (Scale *ca.* 2 : 5).



SPARTA: BRONZES FROM THE ACROPOLIS (x, AT ATHENS.)
 (Scale: Nos. 6 and 7, 4:5; Nos. 1, 4, 22, 23, 3:4; x, 1:2.)

3

3

9

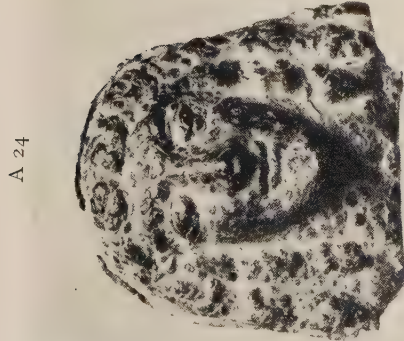


11

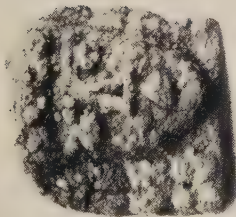
2

8

SPARTA: BRONZES FROM THE ACROPOLIS.
(Scale: Nos. 2, 3 and 8, 4:5; Nos. 9 and 11, 3:4).



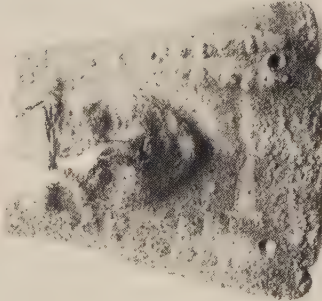
A 24



O 30



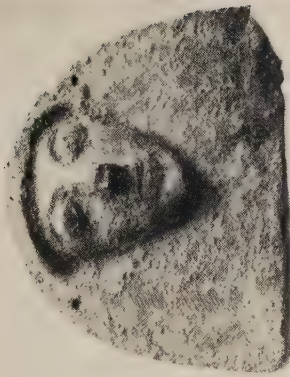
M



A 26



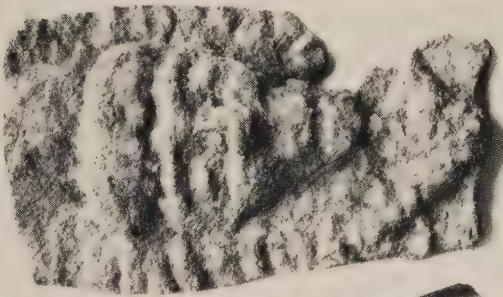
A 25



O 31



A 28



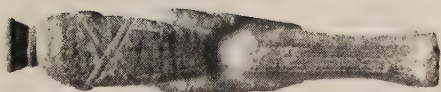
O 29

SPARTA: BRONZE PROTOMAL.

(A from the Acropolis, O from the Orthia Site, M from the Menelaion. Scale 3 : 4.)

A 27

13



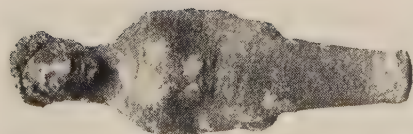
12



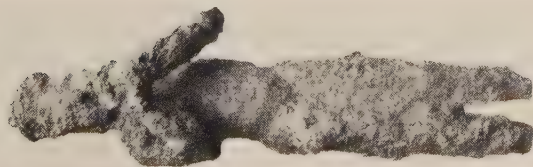
18



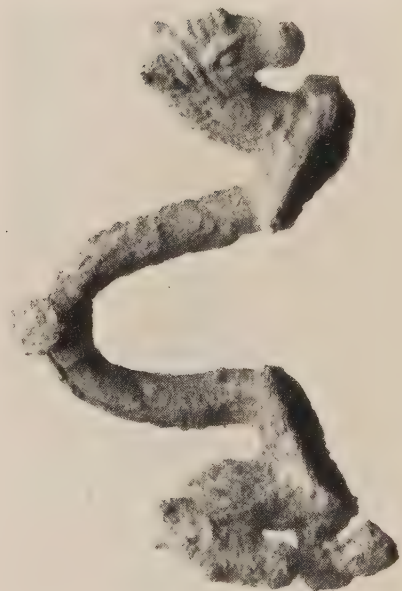
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15



24



17



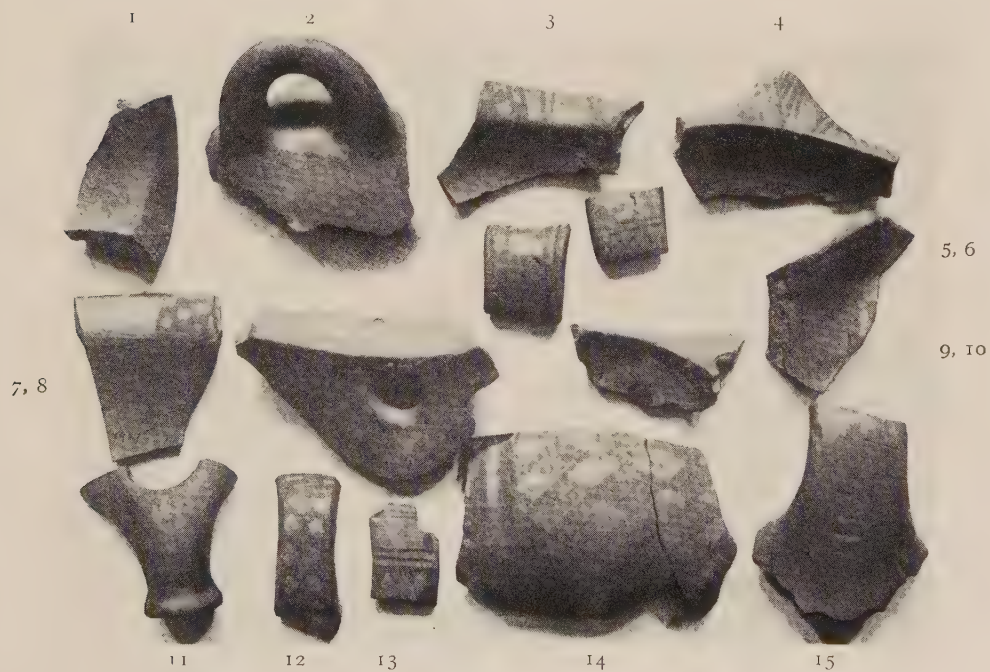
SPARTA: BRONZES FROM THE ORTHIA SITE. (Scale 3:4; No. 14, 4:5.)



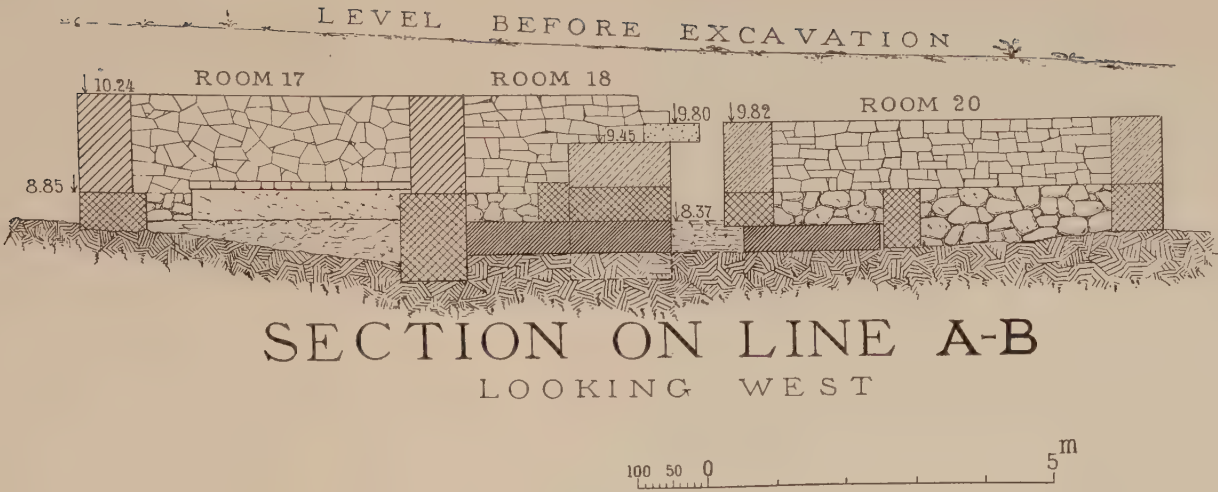
SPARTA: BRONZES FROM THE ORTHIA SITE AND FROM MT. LYKAION (x.)
(Scale 3:4; No. 13a, 4: 5.)



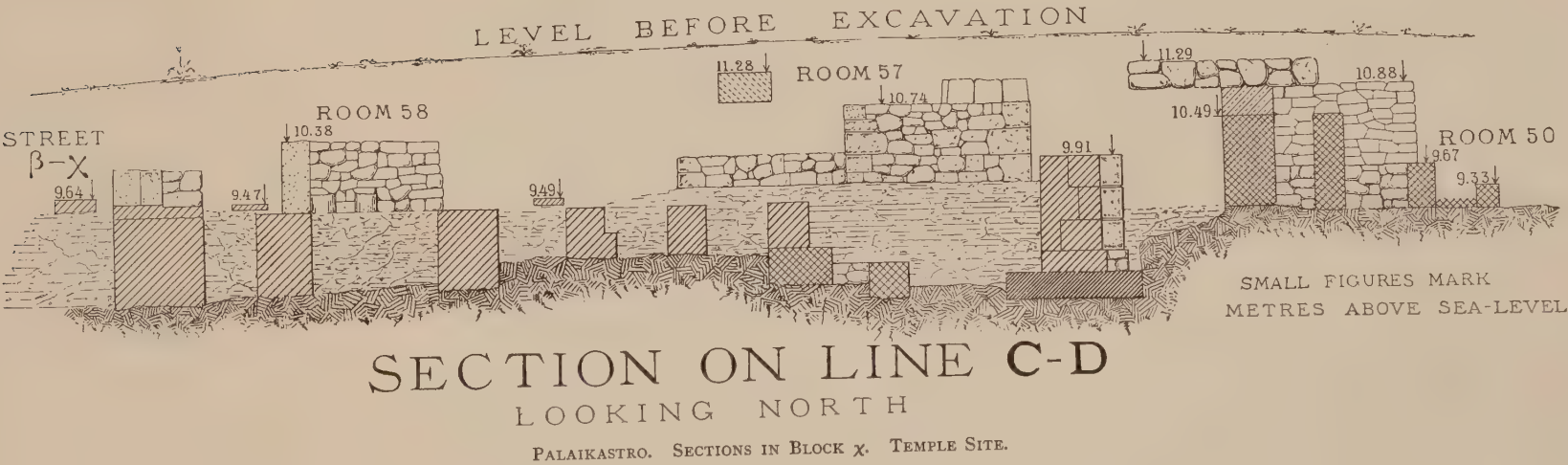
(a). FRAGMENTS OF PAINTED POTTERY; No. 8 IS INCISED. (Scale 1 : 3.)



(b). RIMS, HANDLES, ETC. OF BOWLS AND JUGS. (Scale 1 : 3.)
BOUBOUSTI.

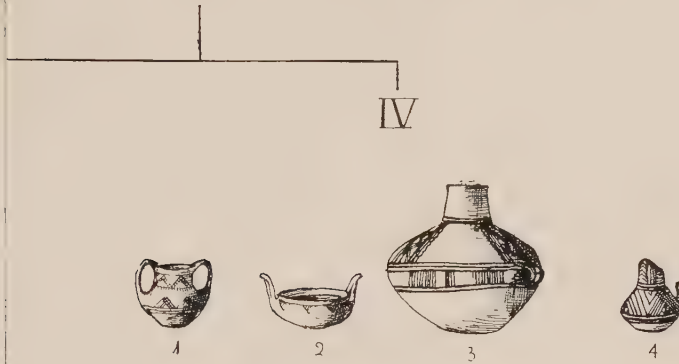


- EARLY MINOAN
- MIDDLE MINOAN
- LATE MINOAN I.
- LATE MINOAN II.
- LATE MINOAN III.
- HELLENIC





2
1:3



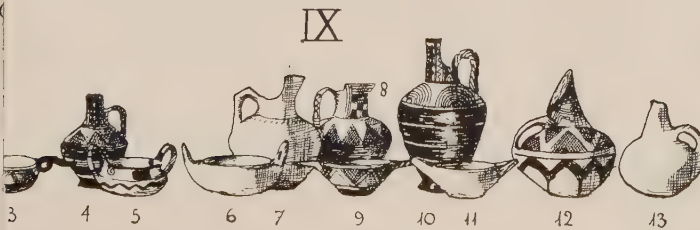
4, 5
a. 1:3



8
4:9



12
4:9



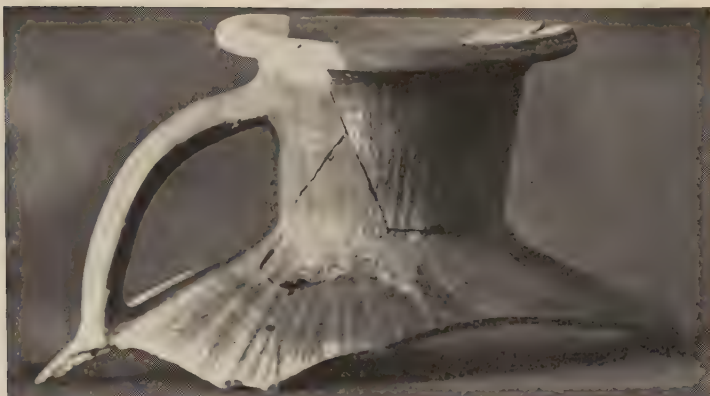
16
4:9

revised

1
ca. 1:4



2
1:3



3
1:5



4, 5
ca. 1:3



6, 7
ca. 2:5



8
1:9



9, 11
1:2



12
1:9



13, 15
1:7



16
1:9



VARDARÓFTSA: THE HIGH TABLE. EXAMPLES OF D 6 (SCRAPED) WARE.
Nos. 8 and 16 from Trench 'A'; remainder from Pit 'F.' (Scale indicated in the margin.)



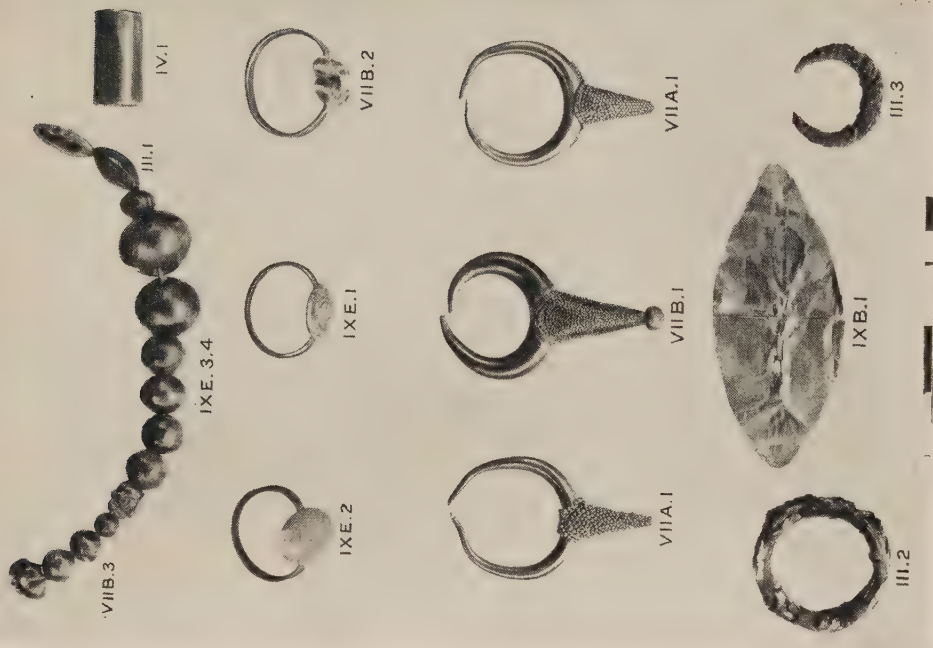
VARDARÓFTSA: MISCELLANEOUS OBJECTS FROM THE HIGH TABLE.
(Scale, Nos. 1-12, 1 : 2; No. 13, 1 : 1.)

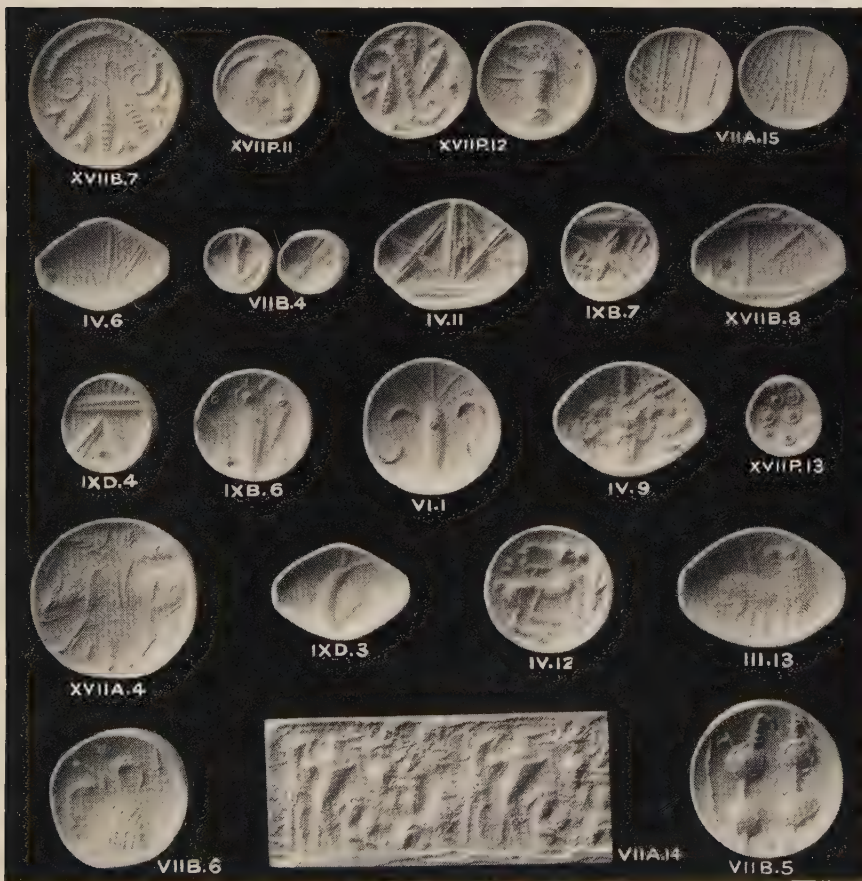


THE BLACK CAVE (*MATRO SPELIO*), KNOSSES.



MAVRO SPELIO, KNOSSOS: BEADS AND GOLD JEWELS.





MAVRO SPELIO: GOLD RING (7 : 1) AND IMPRESSIONS OF GEMS (1 : 1).



MAVRO SPELIO, KNOSSOS: STONE VASES.



MAVRO SPELIO, KNOSSOS: TERRACOTTA IDOL. (Actual size.)



Tomb VII B.



MAVRO SPELIO, KNOSSOS: POTTERY BRAZIERs.



TERRACOTTA SIMA FROM THE TEMPLE OF DICTAEON ZEUS.
(Scale 1:3.)



BRONZE SHIELD FROM THE TEMPLE OF DICTAEAN ZEUS.
(Scale 1 : 2.)



